

## SEARCH REQUEST FORM

67563

Requestor's Name: G. S. Kishine Serial Number: 67/685,940  
Date: 5-29-01 Phone: 308-2440 Art Unit: 1615  
2B01 2E01 CM1

## Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

- ① compound of the (lipid) of the formula in claim 1
- ② liposomes or vesicles having lipid of the formula 1

Thay

(S11C)

JAN 29 2002

RECEIVED

BEST AVAILABLE COPY

## STAFF USE ONLY

Date completed: <u>6/9/02</u>	Search Site	Vendors
Searcher: <u>J. Kishine</u>	<input type="checkbox"/> STIC	<input type="checkbox"/> IG Suite
Terminal time: _____	<input type="checkbox"/> CM-1	<input type="checkbox"/> STN
Elapsed time: _____	<input type="checkbox"/> Pre-S	<input type="checkbox"/> Dialog
CPU time: _____	Type of Search	<input type="checkbox"/> APS
Total time: _____	<input type="checkbox"/> N.A. Sequence	<input type="checkbox"/> Geninfo
Number of Searches: _____	<input type="checkbox"/> A.A. Sequence	<input type="checkbox"/> SDC
Number of Databases: _____	<input type="checkbox"/> Structure	<input type="checkbox"/> DARC/Questel
	<input type="checkbox"/> Bibliographic	<input type="checkbox"/> Other

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 13:52:43 ON 09 JUN 2002

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 9 Jun 2002 VOL 136 ISS 24

FILE LAST UPDATED: 7 Jun 2002 (20020607/ED)

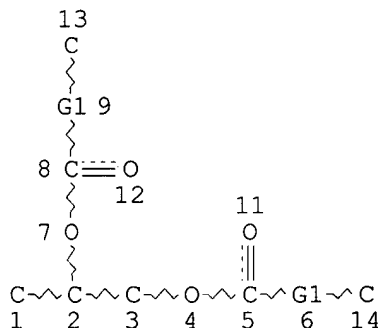
This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=>

=> d stat que

L1 STR



REP G1=(7-20) C

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

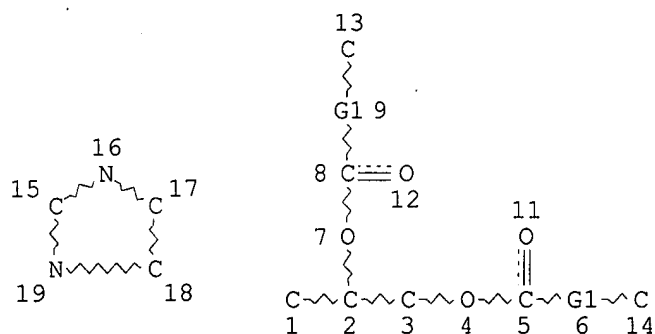
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

L2 17299 SEA FILE=REGISTRY SSS FUL L1

L12 STR



REP G1=(7-20) C  
 NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RSPEC I  
 NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE

L13 57 SEA FILE=REGISTRY SUB=L2 SSS FUL L12  
 L14 45 SEA FILE=HCAPLUS ABB=ON PLU=ON L13  
 L15 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L14 AND LIPOSOME

=>  
 =>

=> d ibib abs hitrn l15

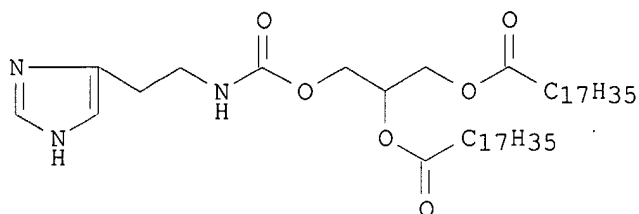
L15 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2001:283762 HCAPLUS  
 DOCUMENT NUMBER: 134:300798  
 TITLE: Neutral-cationic lipid for nucleic acid and drug delivery  
 INVENTOR(S): Huang, Shi Kun; Zalipsky, Samuel; Zhang, Wei-Ming; Jin, Bei; Quinn, Yolanda P.  
 PATENT ASSIGNEE(S): Alza Corporation, USA  
 SOURCE: PCT Int. Appl., 34 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001026629	A2	20010419	WO 2000-US27974	20001010
WO 2001026629	A3	20020510		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,

ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-158693P P 19991008  
 OTHER SOURCE(S): MARPAT 134:300798  
 GI



I

AB A lipid represented by formula (I) was prepd. from 1,2-distearoyl-sn-glycerol, p-nitrophenyl chloroformate, and histamine. The lipid was used to prep. **liposomes** into which DNA was encapsulated. The product is intended for use in delivery of genes to cells for purposes of gene therapy or genetic engineering.

IT **334865-90-6P**

RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
 (neutral-cationic lipid for nucleic acid and drug delivery)

=> d ibib abs hitrn l15 2-12

L15 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:2141 HCAPLUS

DOCUMENT NUMBER: 134:204091

TITLE: Design of supported membranes tethered via metal-affinity ligand-receptor pairs

AUTHOR(S): Radler, Ulf; Mack, Jurgen; Persike, Norbert; Jung, Gunther; Tampe, Robert

CORPORATE SOURCE: Cellular Biochemistry and Biophysics, Institute for Physiological Chemistry, Medical School, Philipps-University Marburg, Marburg, D-35033, Germany

SOURCE: Biophysical Journal (2000), 79(6), 3144-3152

CODEN: BIOJAU; ISSN: 0006-3495

PUBLISHER: Biophysical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Model lipid layers are very promising in investigating the complex network of recognition, transport and signaling processes at membranes. We have developed a novel and generic approach to create supported lipid membranes tethered by metal-affinity binding. By self-assembly we have generated various interfaces that display histidine sequences (6xHis) via polymer spacers. These histidine-functionalized interfaces are designed to allow specific docking and fusion of vesicles contg. metal-chelating lipids. By means of surface plasmon resonance and at. force microscopy we analyzed the formation and subsequently the structure of these solid-supported membranes. Although the affinity const. of single ligand-receptor pairs

is only in the micromolar range, very stable immobilization of these membranes was obsd. This behavior can be explained by multivalent interactions resembling many features of cell adhesion. The process is highly specific, because vesicle docking and bilayer formation are strictly dependent on the presence of metal-affinity ligand-receptor pairs. The surface accessibility and geometry of these tethered membranes were probed by binding of histidine-tagged polypeptides. The supported membranes show adsorption kinetics and values similar to planar supported monolayers. Using various combinations of metal-chelating and histidine-tagged lipids or thiols these metal-affinity-tethered membranes should make a great impact on probing and eventually understanding the dynamic dialog of reconstituted membrane proteins.

IT 329008-69-7

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(PAM3Cys-(Gly-Ser)8-(His)6-OH; self assembly of supported membranes  
tethered via metal-affinity ligand-receptor pairs)

REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:655914 HCAPLUS

DOCUMENT NUMBER: 131:269275

TITLE: Amphipathic pH sensitive compounds and delivery  
systems for delivering biologically active compounds

INVENTOR(S): Wolff, Jon A.; Budker, Vladimir; Gurevich, Vladimir

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 33 pp.  
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5965434	A	19991012	US 1994-365841	19941229

OTHER SOURCE(S): MARPAT 131:269275

AB The present invention provides amphipathic lipid compds. comprising a hydrophilic, cationic, pH-sensitive moiety, the pos. charge of which moiety increases as pH decreases over the pH range of 8.0 to 4.5. These compds. have the structure R1COOCH2CH(OCOR2)CH2R3 [R1,R2=CH3(CH2)12, CH3(CH2)14, CH3(CH2)7CH:CH(CH2)7; R3=1-methylimidazole, cysteamine, morpholine, etc.] or R1COOCH2CR3(OCOR2)CH2OCOR4 [R1,R2,R4=R1,R above; R3=tris(2-aminoethyl)amine, hydroxylamine, pentaethylenehexamine, diethanolamine, or 3,3'-diamino-N-methyldipropylamine]. Vesicular delivery systems comprising such amphipathic compds. and the use of those systems for delivering biol. active substances to cells are also provided. Thus, numerous pH-sensitive amphiphiles were synthesized and incorporated into **liposomes** which were used for transfection of mammalian cells. Transfection was more efficient with **liposomes** contg. the compds. of the invention than those contg. such prior art cationic lipids such as lipofectin and lipofectamine. Addnl., the pH-sensitive amphiphiles were less cytotoxic than lipofectin and lipofectamine.

IT 191990-30-4P 191990-32-6P 191990-33-7P  
245402-82-8P

RL: BUU (Biological use, unclassified); MOA (Modifier or additive use);  
SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation);  
USES (Uses)

(amphipathic pH sensitive compds. and delivery systems for delivering

biol. active compds.)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:82463 HCAPLUS

DOCUMENT NUMBER: 130:316511

TITLE: Targetability of the pendant type polyethyleneglycol-immunoliposomes in vivo

AUTHOR(S): Takizawa, Tomoko; Maruyama, Kazuo; Iwatsuru, Motoharu; Sasaki, Katsunori

CORPORATE SOURCE: Fac. Pharm. Sci., Teikyo Univ., Kanagawa, 199-0195, Japan

SOURCE: Drug Delivery System (1998), 13(6), 407-414

CODEN: DDSYEI; ISSN: 0913-5006

PUBLISHER: Nippon DDS Gakkai Jimukyoku

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

AB Drug delivery to specific cells by immunoliposomes represents a potentially attractive mode of therapy. However, though immunoliposomes are effective in specific binding to target cells in vitro, their targeting efficiency in vivo is relatively low. We have recently developed a new type of polyethyleneglycol (PEG)-immunoliposomes, so-called pendant-type PEG-immunoliposome, which are carried by monoclonal antibodies at the distal ends of PEG chains. Pendant-type PEG immunoliposomes showed high targetability in vivo. In this study, we have synthesized other PEG derivs. with reactive residues at the distal terminal of PEG chains, i.e., DSPE PEG-COOLi, DPPE-PEG Mal and DPPE-PEG-CDI. PEG-liposomes composed of ePC/CH (2:1, m/m) and 6 mol% of PEG deriv. were prepd. and a monoclonal IgG antibody, 34A, which is highly specific to pulmonary endothelial cells, was conjugated to the terminal of PEG-COOH-, PEG Mal- or PEG-CDI-liposomes. PEG-liposomes without antibodies showed the prolonged circulation time and the reduced RES uptake. All 34A-PEG immunoliposomes showed high targeting efficiency to the lung in BALB/c mice. This approach provides a simple means of conjugating antibodies or ligands directly, and should contribute to development of superior targetable drug delivery vesicles for use in diagnostics and therapy.

IT 170010-52-3

RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(targetability of the pendant type polyethyleneglycol-immunoliposomes in vivo)

L15 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:744950 HCAPLUS

DOCUMENT NUMBER: 130:17237

TITLE: Lipid soluble steroid prodrugs

INVENTOR(S): Unger, Evan C.; Shen, Dekang

PATENT ASSIGNEE(S): Imarx Pharmaceutical Corp., USA

SOURCE: PCT Int. Appl., 175 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

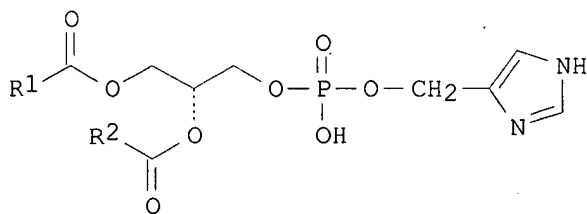
FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

-----  
 WO 9850040            A1    19981112            WO 1998-US7492    19980415  
       W: AU, BR, CA, JP  
       RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
           PT, SE  
       US 6090800            A    20000718            US 1997-851780    19970506  
       AU 9869719            A1   19981127            AU 1998-69719    19980415  
 PRIORITY APPLN. INFO.:            US 1997-851780    A   19970506  
    WO 1998-US7492    W   19980415  
 OTHER SOURCE(S):            MARPAT 130:17237  
 AB    The present invention is directed to novel lipid sol. steroid prodrugs,  
       compns. comprising steroid prodrugs, and uses of the same. Thus,  
       dexamethasone was allowed to esterify with 1,2-dipalmitoyl-sn-glycero-3-  
       succinate to produce the ester which was mixed with DPPC, DPPA and  
       DPPE-PEG. Drug-entrapped vesicles were obtained in which no dexamethasone  
       was detected in washes or supernatants.  
 IT    **216012-51-0P**  
       RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological  
       study); PREP (Preparation); USES (Uses)  
       (lipid sol. steroid prodrugs)  
 REFERENCE COUNT:            5            THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
    RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER:            1997:453971 HCAPLUS  
 DOCUMENT NUMBER:            127:162074  
 TITLE:                        Supramolecular Transformations of Vesicles from Amino  
                                  Acid Based Double Chain Amphiphiles  
 AUTHOR(S):                    Cescato, Claudio; Walde, Peter; Luisi, Pier Luigi  
 CORPORATE SOURCE:            Institut fuer Polymere, ETH-Zentrum, Zurich, CH-8092,  
                                  Switz.  
 SOURCE:                        Langmuir (1997), 13(16), 4480-4482  
                                  CODEN: LANGD5; ISSN: 0743-7463  
 PUBLISHER:                    American Chemical Society  
 DOCUMENT TYPE:                Journal  
 LANGUAGE:                      English  
 GI



AB    Amino acid double chain amphiphiles Me(CH<sub>2</sub>)<sub>10</sub>CO-L-Glu-NH(CH<sub>2</sub>)<sub>11</sub>Me and  
       Me(CH<sub>2</sub>)<sub>10</sub>CO-L-Arg-NH(CH<sub>2</sub>)<sub>11</sub>Me.AcoH, as well as glycerol derivs. I [R<sub>1</sub> = R<sub>2</sub>  
       = Me(CH<sub>2</sub>)<sub>12</sub>; R<sub>1</sub> = Me(CH<sub>2</sub>)<sub>14</sub>, R<sub>2</sub> = Me(CH<sub>2</sub>)<sub>7</sub>CH:CH(CH<sub>2</sub>)<sub>7</sub>] were prepd. and  
       investigated with respect to their capacity of vesicle formation. While  
       vesicles could be prepd. from all these amphiphiles above the phase  
       transition temp. (T<sub>c</sub>), the Glu- and Arg-lipid showed a vesicle-helical  
       transformation if cooled and kept below T<sub>c</sub>.  
 IT    **193764-36-2P 193764-38-4P**  
       RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(prepn. and supramol. transformations of vesicles from amino acid based double chain amphiphiles)

L15 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:905321 HCAPLUS

DOCUMENT NUMBER: 123:296611

TITLE: Phospholipid derivative and vesicle comprising the same.

INVENTOR(S): Miyazaki, Tsuyoshi; Maruyama, Kazuo; Iwatsuru, Motoharu; Sanchika, Kouzoh; Nishida, Mitsuhiro; Yasukohchi, Tohru; Kitano, Shigeru; Suginaka, Akinori; Kadoma, Yoshihito

PATENT ASSIGNEE(S): Nof Corp., Japan

SOURCE: Eur. Pat. Appl., 33 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 657463	A1	19950614	EP 1994-309061	19941206
R: CH, DE, FR, GB, IT, LI, NL, SE				
JP 07157493	A2	19950620	JP 1993-305611	19931206
JP 07157441	A2	19950620	JP 1993-305612	19931206
JP 07165770	A2	19950627	JP 1993-317026	19931216
JP 07165771	A2	19950627	JP 1993-317027	19931216
JP 07291853	A2	19951107	JP 1994-135954	19940617
US 5463066	A	19951031	US 1994-349368	19941205
US 5540935	A	19960730	US 1994-349362	19941205
PRIORITY APPLN. INFO.:			JP 1993-305611	19931206
			JP 1993-305612	19931206
			JP 1993-317026	19931216
			JP 1993-317027	19931216
			JP 1994-135954	19940617
			JP 1994-35094	19940304
AB	Phospholipid derivs. of polyoxyalkylenes and phosphatidylethanolamines terminated with an imidazolecarbonyl group are prepd. and used to form vesicles and to attach functional substances to those vesicles.			
IT	170010-50-1P 170010-51-2P 170010-52-3P 170010-53-4P			
	RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)			
	(polyoxyalkylene phospholipid imidazole derivs. for <b>liposomes</b> )			

L15 ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:229249 HCAPLUS

DOCUMENT NUMBER: 122:4960

TITLE: Stabilization of immobilized hapten-containing **liposomes** with antibody for hapten determination

INVENTOR(S): Fujita, Minoru; Kida, Masaaki

PATENT ASSIGNEE(S): Wako Pure Chem Ind Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 06218272	A2	19940809	JP 1992-328858	19921113

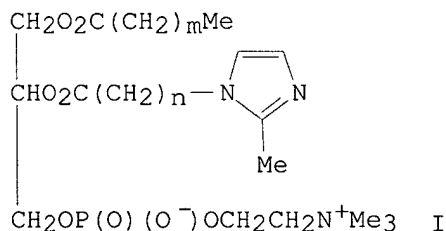
AB Disclosed is a method using antibody to stabilize immobilized hapten-contg. **liposomes**. The immobilized hapten-contg. **liposomes** are used for hapten detn. In example, immobilized hapten-contg. **liposomes** were prepd. with cholesterol, dimyristoylphosphatidylcholine, dimyristoylphosphatidylglycerol, and dipatmitoylphosphatidylethanolamine modified with phenytoin, digoxin, or triiodothyronine, and stabilized with antibody to these haptens. These **liposomes** were used for phenytoin, digoxin, or triiodothyronine detn.

IT **159510-52-8P**  
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)  
(stabilization of immobilized hapten-contg. **liposomes** with antibody for hapten detn.)

L15 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1991:607992 HCAPLUS  
DOCUMENT NUMBER: 115:207992  
TITLE: Preparation of imidazole-containing phospholipids as ligands for iron-porphyrin complexes  
INVENTOR(S): Tsuchida, Hidetoshi; Kon, Yoshuki; Babe, Takeshi; Hasegawa, Etsuo; Nishide, Hiroyuki  
PATENT ASSIGNEE(S): Zaidan Hojin Seisan Kaihatsu Kagaku Kenkyusho, Japan; Nippon Oil and Fats Co., Ltd.  
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 03128358	A2	19910531	JP 1989-182328	19890713
	JP 05073757	B4	19931015		

OTHER SOURCE(S): MARPAT 115:207992  
GI



AB 2-[(2-Methyl-1-imidazolyl)alkanoyl]lysolecithins (I; m = 12-16; n = 10-18), useful as ligands for ribosome-enclosed iron-porphyrin complexes which absorb and desorb O and function as blood substitutes, are prepd.

Thus, 4.0g DCC and 2.0g dimethylaminopyridine were added a soln. of 1.0g 1-myristoyl-sn-glycero-3-phosphocholine [prepd. by hydrolysis of 1,2-dimyristoyl-sn-glycero-3-phosphocholine (II)] and 1.0g 11-[1-(2-methylimidazolyl)]undecanoic acid (prepd. by coupling of 2-methylimidazole with tert-Bu 11-bromoundecanoate followed by hydrolysis) in DMF and the mixt. was allowed to react at room temp. for 24 h to give 19.9% sn-I (m = 12, n = 10) (II). Lipid heme-II complexes enclosed in **liposomes** of II dispersed in 1/30 mM phosphate buffer (pH 7.4) were treated with H<sub>2</sub>S<sub>2</sub>O<sub>4</sub> to give the deoxygenated complex soln. and thereto O was blown into to immediately show a visible spectrum with  $\lambda_{\text{max}}$  of 425, 546 nm corresponding to the O complex. When N was blown into the soln., the visible spectrum was reversibly changed.

IT **136681-11-3P 136681-12-4P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as phospholipid ligand for iron-porphyrin complex)

L15 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1990:50822 HCAPLUS

DOCUMENT NUMBER: 112:50822

TITLE: Oxygenation of porphinatoiron(II) complexes with imidazole-containing glycerophosphocholines in phospholipid bilayers

AUTHOR(S): Tsuchida, Eishun; Hasegawa, Etsuo; Chika, Yuzuru; Babe, Takeshi; Nishide, Hiroyuki

CORPORATE SOURCE: Dep. Polym. Chem., Waseda Univ., Tokyo, 169, Japan

SOURCE: Chem. Lett. (1989), (10), 1727-30

CODEN: CMLTAG; ISSN: 0366-7022

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Diacylglycero-3-phosphocholine derivs. having an imidazole ligand at the terminus of the acyl chain in the 2nd position of the glycerol backbone were synthesized as hemoprotein models. The amphiphilic ligands formed lipid bilayers with phospholipids and the heme complexes gave O complexes in water (pH 7.4) at 25.degree..

IT **124656-93-5P 124656-94-6P**

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and amphiphilic heme complexation in bilayer membranes with, hemoprotein model in relation to)

IT **124656-93-5DP**, complexes with amphiphilic heme

**124656-94-6DP**, complexes with amphiphilic heme

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and oxygen binding by, in phosphatidylcholine bilayer membrane, hemoprotein model in relation to)

L15 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1987:473841 HCAPLUS

DOCUMENT NUMBER: 107:73841

TITLE: **Liposome** immunoassay reagent and method

INVENTOR(S): Kung, Viola Tze; Canova-Davis, Eleanor; Redemann, Carl Temple

PATENT ASSIGNEE(S): Cooper-Lipotech, Inc., USA

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

WO 8604682	A1	19860814	WO 1986-US279	19860207
W: JP				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
US 4622294	A	19861111	US 1985-699860	19850208
EP 215027	A1	19870325	EP 1986-901277	19860207
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 62501800	T2	19870716	JP 1986-501117	19860207
US 4783400	A	19881108	US 1986-898440	19860820
PRIORITY APPLN. INFO.:			US 1985-699860	19850208
			CA 1986-501398	19860207
			WO 1986-US279	19860207

AB A **liposome** assay reagent for the detn. of an analyte in a homogeneous immunoassay comprises a suspension of oligolamellar lipid vesicles contg. encapsulated glucose-6-phosphate dehydrogenase (G6PD), at a specific activity of .apprx.1-15 units/.mu.mole vesicle lipid, and glucose-6-phosphate (G6P) at a concn. of .apprx.2-50, preferably .apprx.5-25 mM. The vesicles have surface-bound ligands that bind specifically and with high affinity to sol. anti-ligands to procedure cell lysis and enzyme release from the **liposomes** on addn. of serum complement. The encapsulated G6P protects the enzyme against inactivation during prepn. by reverse phase evapn. in the presence of org. solvent, and during storage as an aq. suspension. The dipalmitoylphosphatidylethanolamine (DPPE) amide of 3-(4-carboxybutyl)5,5-diphenylhydantoin (I) was prepd. from Na phenytoin by reaction with 5-bromovalerate Me ester, acid hydrolysis, and reaction with DPPE in the presence of diclohexylcarbodiimide and triethylamine. **Liposomes** contg. I and encapsulated G6PD (7 units/.mu.mol) and G6P (8 mM) were formed by reverse phase evapn. and purified by mol.-sieve chromatog. to make a stable lipid vesicle reagent. A competitive inhibition assay for phenytoin comprised (1) reaction of reagent, sample, and antibody to phenytoin; (2) incubation of the mixt. with guinea pig serum (contg. complement), NAD, and G6P; (3) stopping the reaction with Na<sub>2</sub>CO<sub>3</sub>; and (4) measuring released G6PDH at 340 nm. The assay showed linearity and sensitivity over a 2.5-30 .mu.g/mL phenytoin range.

IT **109738-39-8P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and use of, in **liposome** reagent formation, for phenytoin immunoassay)

L15 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1986:586645 HCAPLUS

DOCUMENT NUMBER: 105:186645

TITLE: Location of electron-transfer centers in membrane-bound NADPH-cytochrome P-450 reductase

AUTHOR(S): Krainev, A. G.; Weiner, L. M.; Mitrofanov, D. V.; Lyakhovich, V. V.

CORPORATE SOURCE: Inst. Chem. Kinet. Combust., Novosibirsk, USSR

SOURCE: Biol. Membr. (1986), 3(8), 816-22

CODEN: BIMEE9

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB The location of NADPH-cytochrome P 450 reductase (I) prosthetic groups (FAD and FMN) relative to the membrane surface was studied. For this purpose, **liposomes** prepd. from egg lecithin contg. spin-labeled analogs of stearic acid and phosphatidylcholine were employed. The temp. dependence of the redn. rates of these compds. by ascorbate allowed the location of the nitroxyl labels in respect to the membrane surface. Proteoliposomes contg. highly purified I of rat liver and spin labels were

obtained by Na cholate solubilization followed by reconstitution on Sephadex LH-20. The rates of NADPH-dependent spin label redn. were estd. in these proteoliposomes at temps. of 2-32.degree.. The results indicated that 1 active centers are located near the membrane surface.

IT 104953-05-1

RL: RCT (Reactant)

(reaction of, with NADPH-cytochrome P 450 reductase in liposomes, kinetics of)

=>

=> select hit rn l15 1-12

E1 THROUGH E20 ASSIGNED

=> fil reg

FILE 'REGISTRY' ENTERED AT 13:55:03 ON 09 JUN 2002

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 7 JUN 2002 HIGHEST RN 427375-75-5

DICTIONARY FILE UPDATES: 7 JUN 2002 HIGHEST RN 427375-75-5

TSCA INFORMATION NOW CURRENT THROUGH January 7, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>

=>

=> d his l16

(FILE 'HCAPLUS' ENTERED AT 13:52:43 ON 09 JUN 2002)

SELECT HIT RN L15 1-12

FILE 'REGISTRY' ENTERED AT 13:55:03 ON 09 JUN 2002

L16 20 S E1-E20

=>

=> d ide can l16 1-20

L16 ANSWER 1 OF 20 REGISTRY COPYRIGHT 2002 ACS

RN 334865-90-6 REGISTRY

CN Octadecanoic acid, (1S)-1-[[[2-(1H-imidazol-4-yl)ethyl]amino]carbonyl]oxy)methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

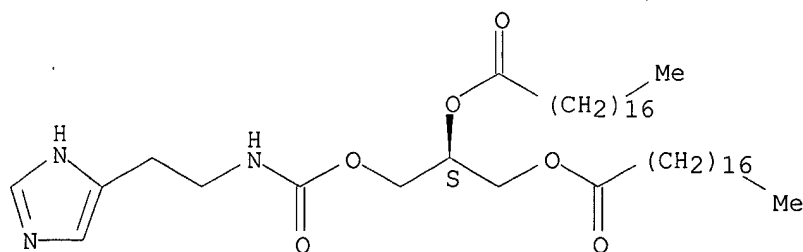
FS STEREOSEARCH

MF C45 H83 N3 O6

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:300798

L16 ANSWER 2 OF 20 REGISTRY COPYRIGHT 2002 ACS

RN **329008-69-7** REGISTRY

CN L-Histidine, S-[2,3-bis[(1-oxohexadecyl)oxy]propyl]-N-(1-oxohexadecyl)-L-cysteinylglycyl-L-serylglycyl-L-serylglycyl-L-serylglycyl-L-serylglycyl-L-serylglycyl-L-serylglycyl-L-serylglycyl-L-seryl-L-histidyl-L-histidyl-L-histidyl-L-histidyl-L-histidyl- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

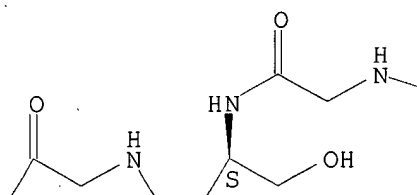
MF C130 H209 N35 O37 S

SR CA

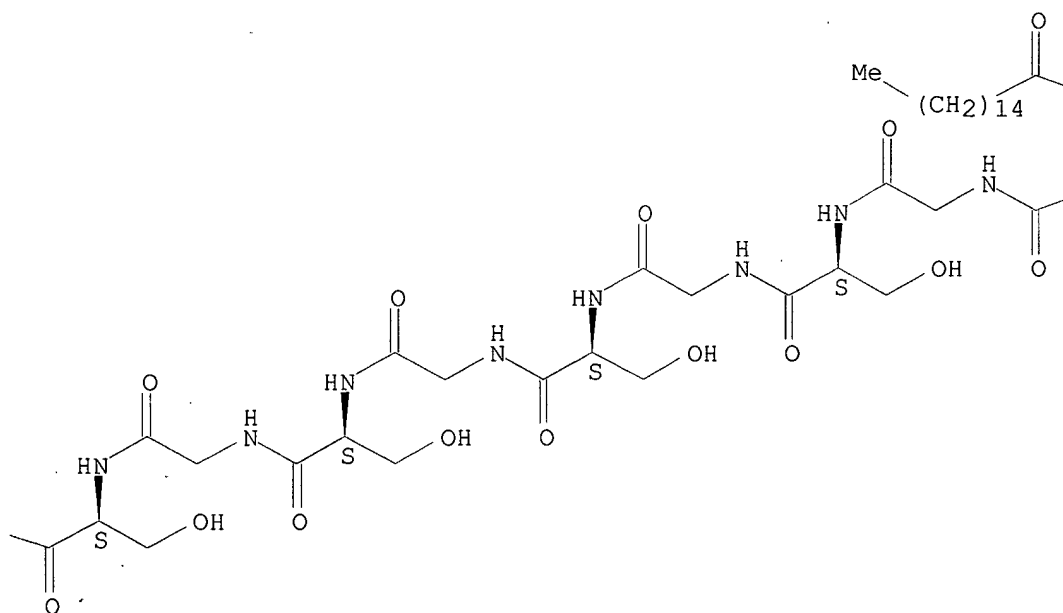
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

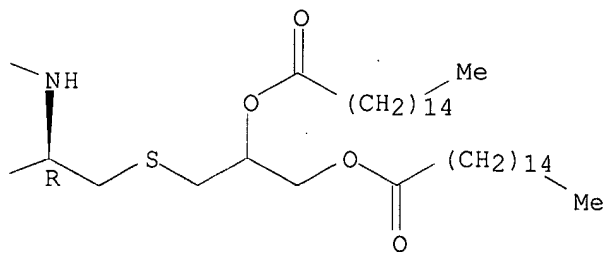
PAGE 1-B



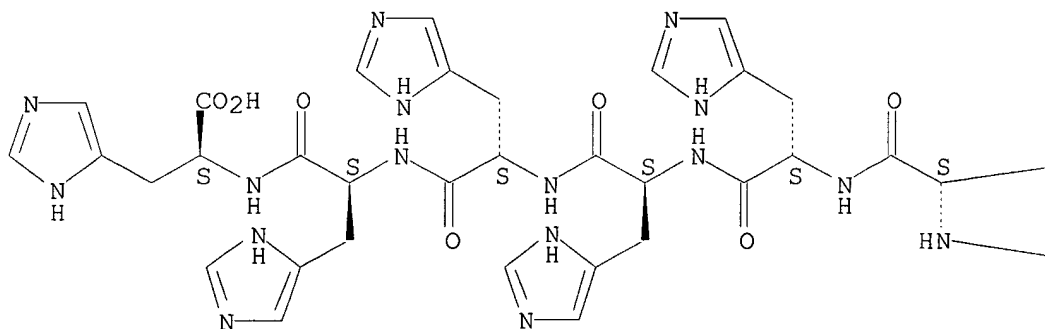
PAGE 1-C



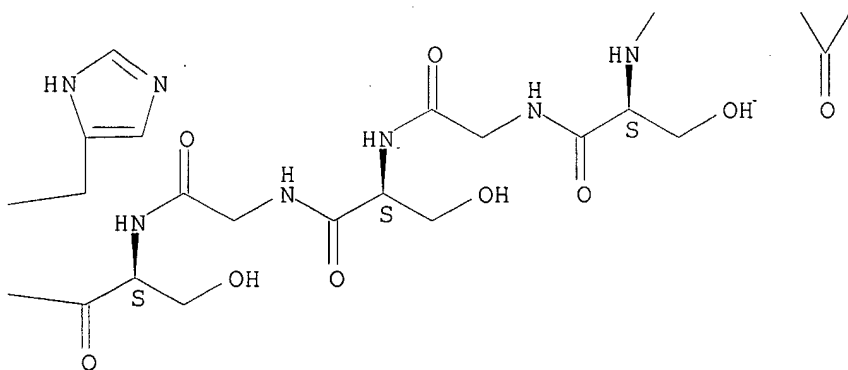
PAGE 1-D



PAGE 2-A



PAGE 2-B



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:204091

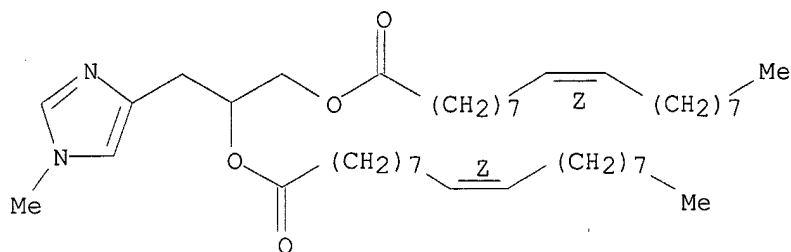
L16 ANSWER 3 OF 20 REGISTRY COPYRIGHT 2002 ACS

RN 245402-82-8 REGISTRY

CN 9-Octadecenoic acid (9Z)-, 1-[(1-methyl-1H-imidazol-4-yl)methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

FS STEREOSEARCH  
 MF C43 H76 N2 O4  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Double bond geometry as shown.



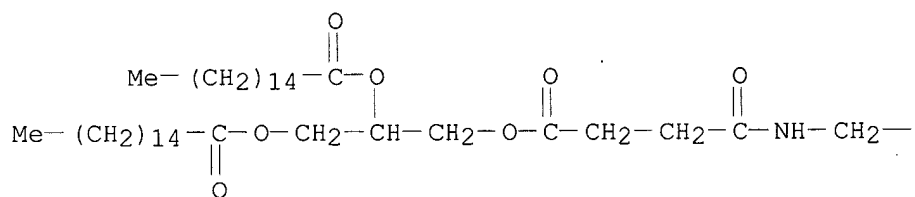
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

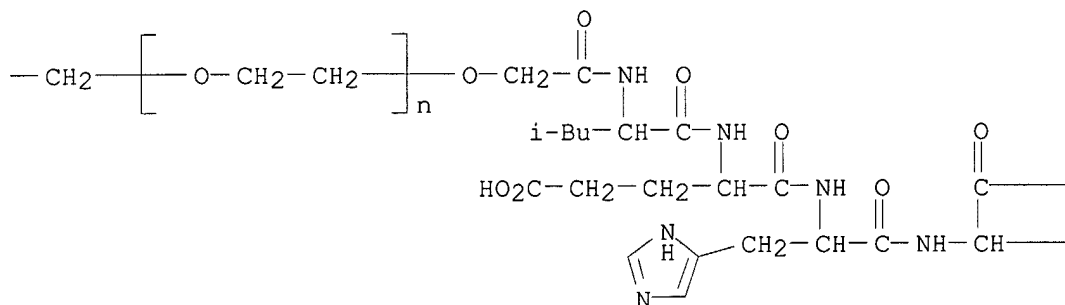
1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:269275

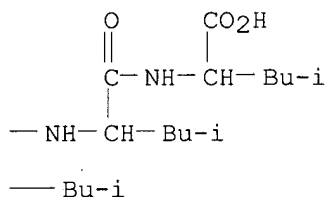
L16 ANSWER 4 OF 20 REGISTRY COPYRIGHT 2002 ACS  
 RN **216012-51-0** REGISTRY  
 CN L-Leucine, hydroxyacetyl-L-leucyl-L-.alpha.-glutamyl-L-histidyl-L-leucyl-L-leucyl-, ether with .alpha.-[2-[[4-[(2R)-2,3-bis[(1-oxohexadecyl)oxy]propoxy]-1,4-dioxobutyl]amino]ethyl]-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE  
 MF (C2 H4 O)<sub>n</sub> C78 H137 N9 O18  
 CI PMS  
 PCT Polyether  
 SR CA  
 LC STN Files: CA, CAPLUS

PAGE 1-A





PAGE 1-C



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:17237

L16 ANSWER 5 OF 20 REGISTRY COPYRIGHT 2002 ACS

RN 193764-38-4 REGISTRY

CN 9-Octadecenoic acid (9Z)-, 1-[[[hydroxy(1H-imidazol-4-ylmethoxy)phosphinyl]oxy]methyl]-2-[(1-oxohexadecyl)oxy]ethyl ester, (R)-(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 9-Octadecenoic acid (Z)-, 1-[[[hydroxy(1H-imidazol-4-ylmethoxy)phosphinyl]oxy]methyl]-2-[(1-oxohexadecyl)oxy]ethyl ester, (R)-

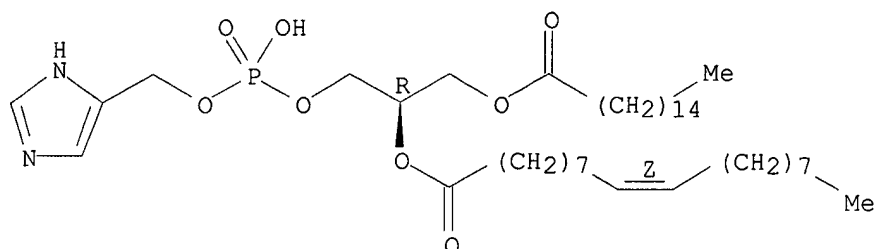
FS STEREOSEARCH

MF C41 H75 N2 O8 P

SR      CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.  
Double bond geometry as shown.



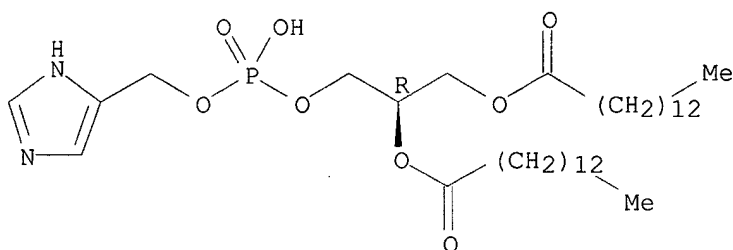
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 127:162074

L16 ANSWER 6 OF 20 REGISTRY COPYRIGHT 2002 ACS  
RN **193764-36-2** REGISTRY  
CN Tetradecanoic acid, 1-[[[hydroxy(1H-imidazol-4-ylmethoxy)phosphinyl]oxy]methyl]-1,2-ethanediyl ester, (R)- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C35 H65 N2 O8 P  
SR CA  
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

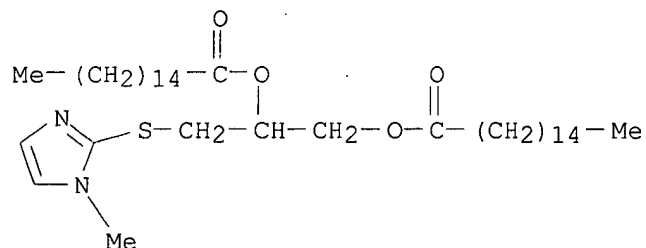


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 127:162074

L16 ANSWER 7 OF 20 REGISTRY COPYRIGHT 2002 ACS  
RN **191990-33-7** REGISTRY  
CN Hexadecanoic acid, 1-[[[1-methyl-1H-imidazol-2-ylthio]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C39 H72 N2 O4 S  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:269275

REFERENCE 2: 127:95531

L16 ANSWER 8 OF 20 REGISTRY COPYRIGHT 2002 ACS

RN **191990-32-6** REGISTRY

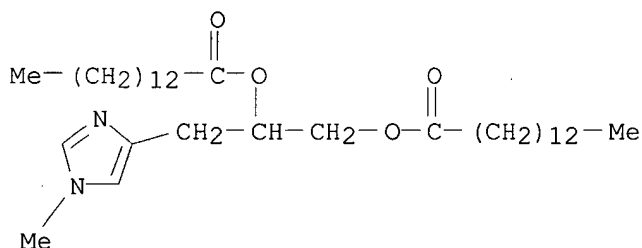
CN Tetradecanoic acid, 2-((1-methyl-1H-imidazol-4-yl)methyl)ethyl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C35 H64 N2 O4

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:269275

REFERENCE 2: 127:95531

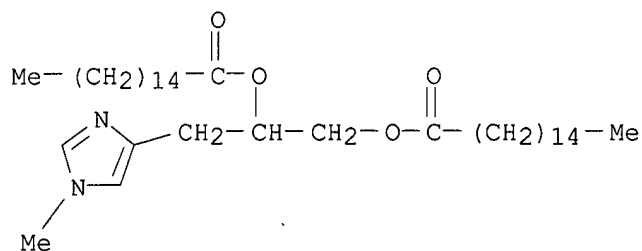
L16 ANSWER 9 OF 20 REGISTRY COPYRIGHT 2002 ACS

RN **191990-30-4** REGISTRY

CN Hexadecanoic acid, 1-((1-methyl-1H-imidazol-4-yl)methyl)-2-ethanediyl ester- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C39 H72 N2 O4  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1967 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:269275

REFERENCE 2: 127:95531

L16 ANSWER 10 OF 20 REGISTRY COPYRIGHT 2002 ACS

RN **170010-53-4** REGISTRY

CN Poly(oxy-1,2-ethanediyl), .alpha.-(1H-imidazol-1-ylcarbonyl)-.omega.-[[9-hydroxy-9-oxido-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-8,10,14-trioxa-5-aza-9-phosphatriciacont-1-yl]oxy]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Poly(oxy-1,2-ethanediyl), .alpha.-(1H-imidazol-1-ylcarbonyl)-.omega.-[[9-hydroxy-4,15-dioxo-12-[(1-oxohexadecyl)oxy]-8,10,14-trioxa-5-aza-9-phosphatriciacont-1-yl]oxy]-, P-oxide

MF (C2 H4 O)<sub>n</sub> C45 H82 N3 O11 P

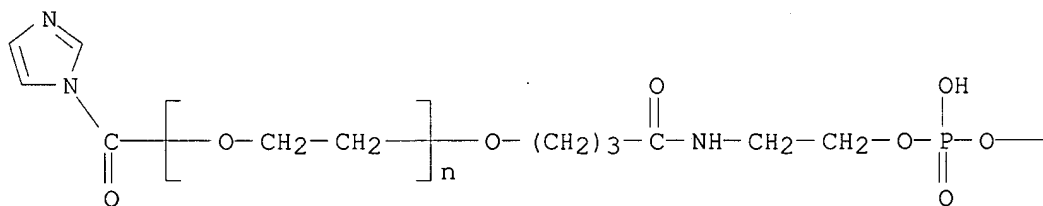
CI PMS

PCT Polyether

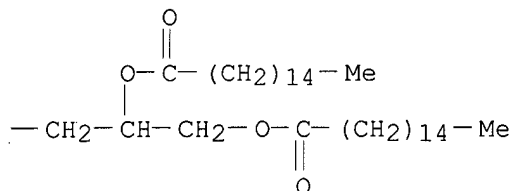
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



PAGE 1-B



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 123:296611

L16 ANSWER 11 OF 20 REGISTRY COPYRIGHT 2002 ACS

RN **170010-52-3** REGISTRY

CN Poly(oxy-1,2-ethanediyl), .alpha.-[9-hydroxy-9-oxido-1,4,15-trioxo-12-[(1-oxohexadecyl)oxy]-8,10,14-trioxa-5-aza-9-phosphatriacont-1-yl]-.omega.-[(1H-imidazol-1-ylcarbonyl)oxy]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Poly(oxy-1,2-ethanediyl), .alpha.-[9-hydroxy-1,4,15-trioxo-12-[(1-oxohexadecyl)oxy]-8,10,14-trioxa-5-aza-9-phosphatriacont-1-yl]-.omega.-[(1H-imidazol-1-ylcarbonyl)oxy]-, P-oxide

MF (C2 H4 O)<sub>n</sub> C45 H80 N3 O12 P

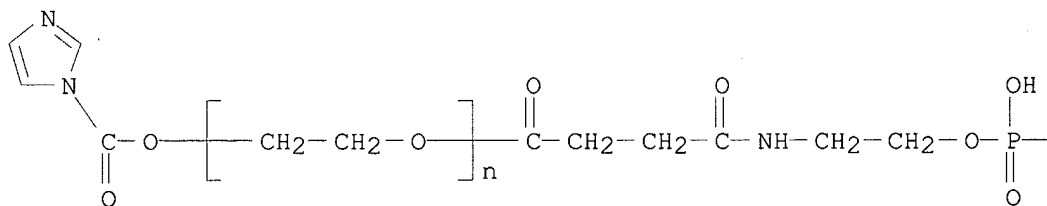
CI PMS

PCT Polyether

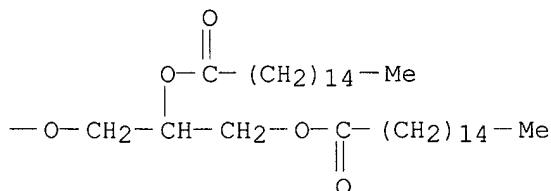
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



PAGE 1-B



2 REFERENCES IN FILE CA (1967 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:316511

REFERENCE 2: 123:296611

L16 ANSWER 12 OF 20 REGISTRY COPYRIGHT 2002 ACS

RN 170010-51-2 REGISTRY

CN Poly(oxy-1,2-ethanediyl), .alpha.-(1H-imidazol-1-ylcarbonyl)-.omega.-[[7-hydroxy-7-oxido-2,13-dioxo-10-[(1-oxohexadecyl)oxy]-6,8,12-trioxa-3-aza-7-phosphaoctacos-1-yl]oxy]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Poly(oxy-1,2-ethanediyl), .alpha.-(1H-imidazol-1-ylcarbonyl)-.omega.-[[7-hydroxy-2,13-dioxo-10-[(1-oxohexadecyl)oxy]-6,8,12-trioxa-3-aza-7-phosphaoctacos-1-yl]oxy]-, P-oxide

MF (C2 H4 O)<sub>n</sub> C43 H78 N3 O11 P

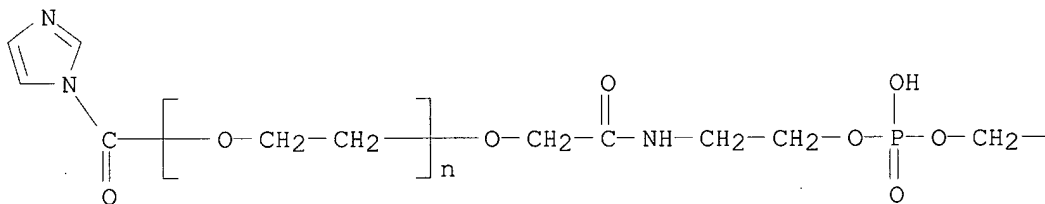
CI PMS

PCT Polyether

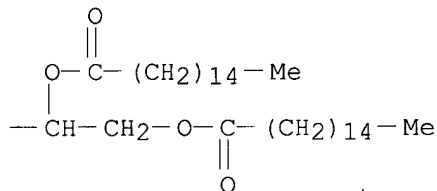
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



PAGE 1-B



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 123:296611

L16 ANSWER 13 OF 20 REGISTRY COPYRIGHT 2002 ACS

RN 170010-50-1 REGISTRY

CN Poly(oxy-1,2-ethanediyl), .alpha.-[6-hydroxy-6-oxido-1,12-dioxo-9-[(1-oxohexadecyl)oxy]-5,7,11-trioxa-2-aza-6-phosphaheptacos-1-yl]-.omega.-[(1H-imidazol-1-ylcarbonyl)oxy]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

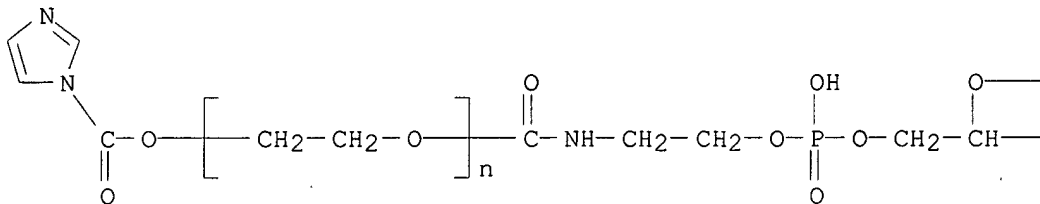
CN Poly(oxy-1,2-ethanediyl), .alpha.-[6-hydroxy-1,12-dioxo-9-[(1-oxohexadecyl)oxy]-5,7,11-trioxa-2-aza-6-phosphaheptacos-1-yl]-.omega.-[(1H-imidazol-1-ylcarbonyl)oxy]-, P-oxide

MF (C2 H4 O)<sub>n</sub> C42 H76 N3 O11 P

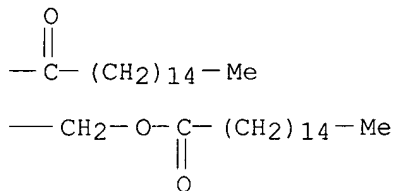
CI PMS

PCT Polyether  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



PAGE 1-B



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 123:296611

L16 ANSWER 14 OF 20 REGISTRY COPYRIGHT 2002 ACS

RN **159510-52-8** REGISTRY

CN Hexadecanoic acid, 1-[22-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-3-hydroxy-3-oxido-8,11,18-trioxo-9-[4-[[1-oxo-5-(2-oxo-4,4-diphenyl-1-imidazolidinyl)pentyl]amino]butyl]-2,4-dioxa-7,10,17-triaza-3-phosphadocos-1-yl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1H-Thieno[3,4-d]imidazole, hexadecanoic acid deriv.

CN Hexadecanoic acid, 1-[22-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-3-hydroxy-8,11,18-trioxo-9-[4-[[1-oxo-5-(2-oxo-4,4-diphenyl-1-imidazolidinyl)pentyl]amino]butyl]-2,4-dioxa-7,10,17-triaza-3-phosphadocos-1-yl]-1,2-ethanediyl ester, P-oxide

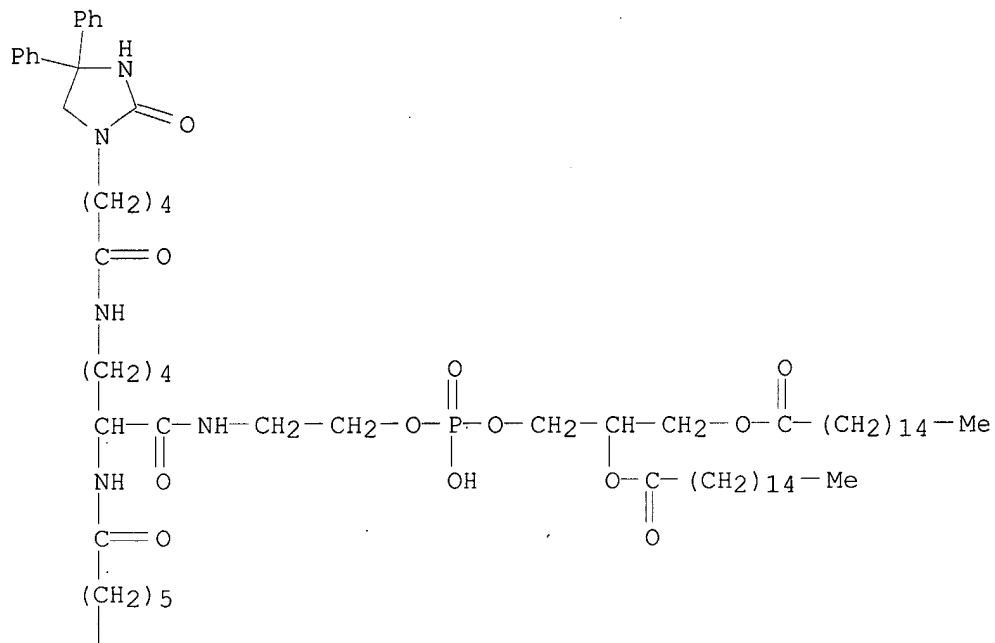
FS 3D CONCORD

MF C79 H131 N8 O14 P S

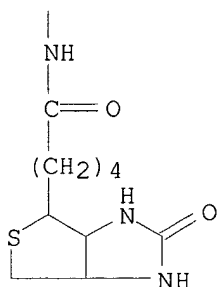
SR CA

LC STN Files: CA, CAPLUS

PAGE 1-A



PAGE 2-A



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 122:4960

L16 ANSWER 15 OF 20 REGISTRY COPYRIGHT 2002 ACS

RN **136681-12-4** REGISTRY

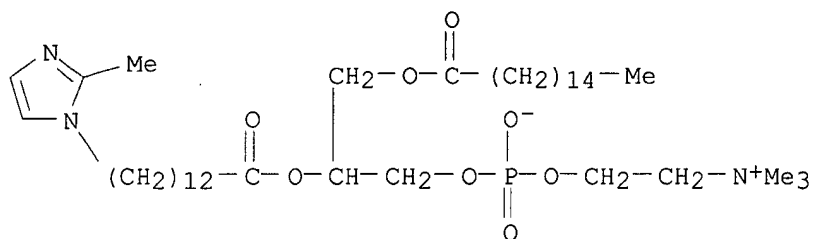
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-  
 [[13-(2-methyl-1H-imidazol-1-yl)-1-oxotridecyl]oxy]-10-oxo-, inner salt,  
 4-oxide (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C41 H78 N3 O8 P

SR CA

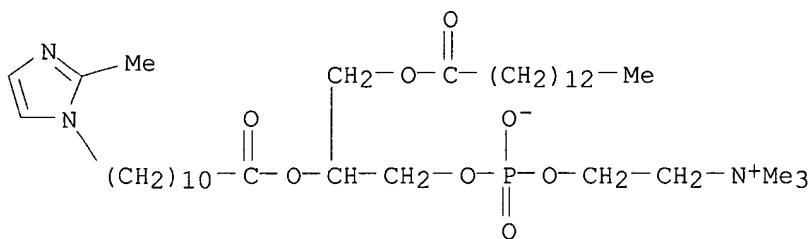
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:207992

```
L16 ANSWER 16 OF 20  REGISTRY  COPYRIGHT 2002 ACS
RN 136681-11-3  REGISTRY
CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-[[11-
(2-methyl-1H-imidazol-1-yl)-1-oxoundecyl]oxy]-11-oxo-, inner salt, 4-oxide
(9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C37 H70 N3 O8 P
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)
```

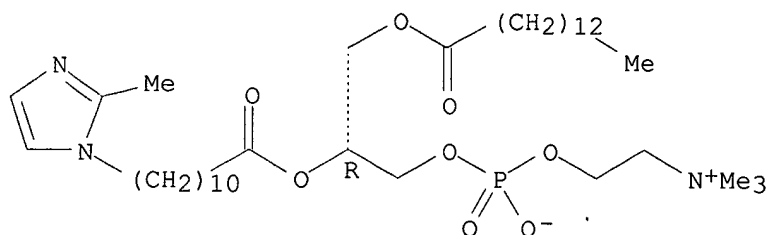


1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:207992

```
L16  ANSWER 17 OF 20  REGISTRY  COPYRIGHT 2002 ACS
RN   124656-94-6  REGISTRY
CN   3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-[[11-
    (2-methyl-1H-imidazol-1-yl)-1-oxoundecyl]oxy]-10-oxo-, inner salt,
    4-oxide, (R)- (9CI)  (CA INDEX NAME)
FS   STEREOSEARCH
MF   C37 H70 N3 O8 P
SR   CA
LC   STN Files:    BEILSTEIN*, CA, CAPLUS
    (*File contains numerically searchable property data)
```

Absolute stereochemistry.

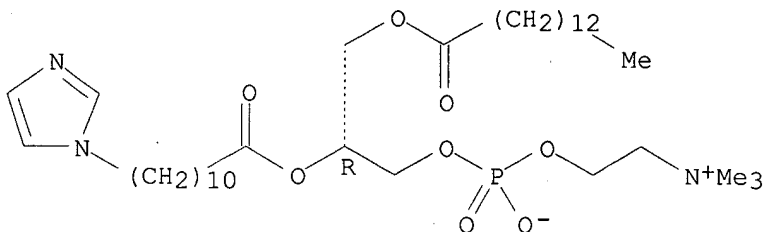


1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 112:50822

L16 ANSWER 18 OF 20 REGISTRY COPYRIGHT 2002 ACS  
 RN **124656-93-5** REGISTRY  
 CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-7-[[11-(1H-imidazol-1-yl)-1-oxoundecyl]oxy]-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide, (R)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C36 H68 N3 O8 P  
 SR CA  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.

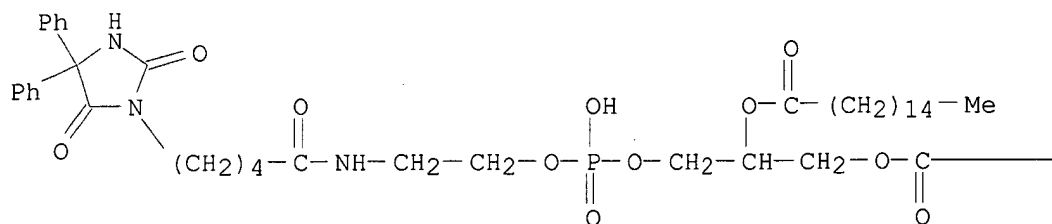


1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 112:50822

L16 ANSWER 19 OF 20 REGISTRY COPYRIGHT 2002 ACS  
 RN **109738-39-8** REGISTRY  
 CN Hexadecanoic acid, 1-[12-(2,5-dioxo-4,4-diphenyl-1-imidazolidinyl)-3-hydroxy-3-oxido-8-oxo-2,4-dioxo-7-aza-3-phosphadodec-1-yl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Hexadecanoic acid, 1-[12-(2,5-dioxo-4,4-diphenyl-1-imidazolidinyl)-3-hydroxy-8-oxo-2,4-dioxo-7-aza-3-phosphadodec-1-yl]-1,2-ethanediyl ester, P-oxide  
 FS 3D CONCORD  
 MF C57 H92 N3 O11 P  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



PAGE 1-B

— (CH<sub>2</sub>)<sub>14</sub>—Me

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 107:73841

L16 ANSWER 20 OF 20 REGISTRY COPYRIGHT 2002 ACS

RN **104953-05-1** REGISTRY

CN 1H-Imidazol-1-yloxy, 2,5-dihydro-4-[7-hydroxy-7-oxido-2,13-dioxo-10-[(1-oxohexadecyl)oxy]-8,12-dioxa-4-aza-7-phosphaoctacos-1-yl]-2,2,5,5-tetramethyl- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

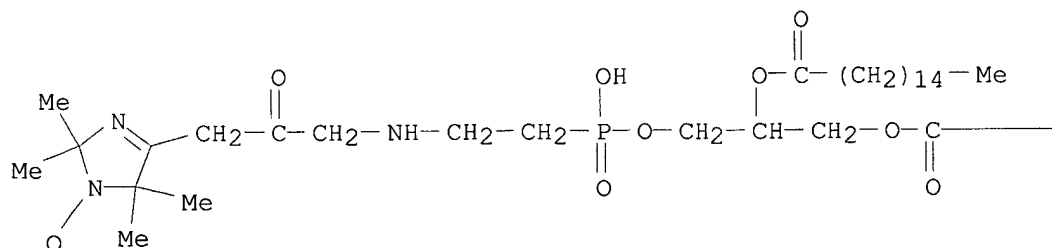
CN 1H-Imidazol-1-yloxy, 2,5-dihydro-4-[7-hydroxy-2,13-dioxo-10-[(1-oxohexadecyl)oxy]-8,12-dioxa-4-aza-7-phosphaoctacos-1-yl]-2,2,5,5-tetramethyl-, P-oxide

MF C47 H89 N3 O9 P

SR CA

LC STN Files: CA, CAPLUS

PAGE 1-A



— (CH<sub>2</sub>)<sub>14</sub>—Me

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 105:186645

```
=> fil hcapls
'HCAPLS' IS NOT A VALID FILE NAME
SESSION CONTINUES IN FILE 'HCAPLUS'
```

```
=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 13:59:25 ON 09 JUN 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)
```

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

```
FILE COVERS 1907 - 9 Jun 2002 VOL 136 ISS 24
FILE LAST UPDATED: 7 Jun 2002 (20020607/ED)
```

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

```
=> d stat que l19 nos
L1          STR
L2          17299 SEA FILE=REGISTRY SSS FUL L1
L12         STR
L13         57 SEA FILE=REGISTRY SUB=L2 SSS FUL L12
L14         45 SEA FILE=HCAPLUS ABB=ON PLU=ON L13
L15         12 SEA FILE=HCAPLUS ABB=ON PLU=ON L14 AND LIPOSOME
L18         33 SEA FILE=HCAPLUS ABB=ON PLU=ON L14 NOT L15
L19         13 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND (?MEDICI? OR ?DRUG?
           OR ?THERAP? OR ?PHARMA?)
```

```
=> d ibib abs hitrn l19 1-13
```

```
L19 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:935597 HCAPLUS
DOCUMENT NUMBER: 136:54028
TITLE: Preparation of vitronectin receptor antagonist
      pharmaceuticals
INVENTOR(S): Rajopadhye, Milind; Barrett, John A.; Carpenter, Alan
              P., Jr.; Cheesman, Edward H.; Harris, Thomas D.
PATENT ASSIGNEE(S): Dupont Pharmaceuticals Company, USA
SOURCE: PCT Int. Appl., 449 pp.
        CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
```

FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001098294	A2	200111227	WO 2001-US19794	20010621
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: US 2000-213212P P 20000621

OTHER SOURCE(S): MARPAT 136:54028

AB Compds. (Q)d-Ln-(Ch)d' (Q is a residue having an indazole-type moiety, d = 1-10, d' = 1-100, Ln is a linking group, Ch is a metal-bonding unit) were prepd. for use in the diagnosis and treatment of cancer. The present invention provides novel compds. useful for the treatment of rheumatoid arthritis. Thus, 2-[[[4-[4-[[[3-[2-[2-[3-[[6-[[1-aza-2-(2-sulphophenyl)vinyl]amino](3-pyridyl)]carbonylamino]propoxy]ethoxy]ethoxy]propyl]amino]sulfonyl]phenyl]phenyl]sulfonyl]amino]-3-[[1-[3-(indazole-2-ylamino)propyl](1H-indazol-5-yl)]carbonylamino]propanoic acid was prepd. (claimed compd.). Syntheses of **radiopharmaceuticals**, e.g., <sup>99m</sup>Tc(VnA) (tricine) (phosphine), where VnA represents the vitronectin receptor antagonist, are also described.

IT 277329-15-4

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(prepn. of vitronectin receptor antagonist **pharmaceuticals**)

L19 ANSWER 2 OF 13 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:206294 HCAPLUS

DOCUMENT NUMBER: 135:271464

TITLE: Adjuvant effects of various lipopeptides and interferon-.gamma. on the humoral immune response of chickens

AUTHOR(S): Erhard, M. H.; Schmidt, P.; Zinsmeister, P.; Hofmann, A.; Munster, U.; Kaspers, B.; Wiesmuller, K. -H.; Bessler, W. G.; Stangassinger, M.

CORPORATE SOURCE: Institut fur Physiologie, Physiologische Chemie und Tierernahrung, Tierarztliche Fakultat, Universitat Munchen, Munchen, 80539, Germany

SOURCE: Poultry Science (2000), 79(9), 1264-1270

CODEN: POSCAL; ISSN: 0032-5791

PUBLISHER: Poultry Science Association, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The adjuvant effects of various lipopeptides and recombinant chicken interferon .gamma. (IFN-.gamma.) on the humoral immune response of laying hens was investigated in 4 immunization studies. The authors used the lipopeptide Pam3Cys-Ser-(Lys)4 (PCSL), the conjugate P-Th1 consisting of the lipopeptide P3CS and the T-helper epitope Th1 (FISEAIIHVLHSRHPG), and the conjugate P-Th2 of the lipopeptide P3CSS and the T-helper epitope Th2, which corresponds to the peptide EWEFVNTPLV, as adjuvants. Human serum albumin (HSA), recombinant bovine somatotropin (RBST), and human IgG served as antigens in the different expts. All tested adjuvants enhanced the humoral immune response with various intensities. Chickens showed

high antibody titers after the immunization with HSA even without adjuvant, but the adjuvant effects of PCSL and the combination of PCSL and recombinant chicken interferon- $\gamma$ . (IFN- $\gamma$ .) were much more pronounced using the antigens RBST and IgG. Esp. after the third immunization, higher titers of antibodies were induced by the coadministration of P-Th1 and, to a greater extent, by the combination of PCSL and P-Th1 compared with the use of PCSL. Also, chickens that had received PCSL and P-Th2 showed the highest immune response, even after the second booster. The av. concns. of chicken IgY were higher in 5-mo-old chickens (9.4 mg/mL serum and 10.1 mg/mL egg yolk) compared with 9-mo-old chickens (5.9 mg/mL serum and 5.1 mg/mL egg yolk). The specific serum antibody response was higher in the older chickens than in the younger chickens. Because chicken antibodies are likely to be used increasingly for diagnostics and **therapy** in the future, lipopeptides and recombinant chicken IFN- $\gamma$ . may find many applications as adjuvants, thus contributing to the welfare of exptl. animals.

IT 202123-06-6

RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)  
(adjuvant effects of various lipopeptides and interferon- $\gamma$ . on humoral immune response of chickens)

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 3 OF 13 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:95555 HCAPLUS

DOCUMENT NUMBER: 135:13817

TITLE: Enhancement of gene delivery by an analogue of

.alpha.-MSH in a receptor-independent fashion

AUTHOR(S): Chluba, J.; Lima de Souza, D.; Frisch, B.; Schuber, F.

CORPORATE SOURCE: Laboratoire de Chimie Bioorganique, UMR 7514 CNRS-ULP; Faculte de Pharmacie, Illkirch, 67400, Fr.

SOURCE: Biochimica et Biophysica Acta (2001), 1510(1-2), 198-208

CODEN: BBACAQ; ISSN: 0006-3002

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In order to transfect melanoma specifically by receptor-mediated endocytosis we prepd. dioctadecyl aminoglycylspermine (lipospermine)-DNA complexes with [Nle4,D-Phe7]-.alpha.-MSH(4-10), a pseudo-peptide analog of .alpha.-MSH (.alpha.-MSH) linked to a thiol-reactive phospholipid. With these complexes we obtained an up to 70-fold increase of transfection with B16-F1 melanoma cells. However when B16-G4F, an .alpha.-MSH receptor neg. melanoma cell line was transfected, an up to 700-fold increased transfection efficiency was obsd. The peptide hormone analog was equally efficient when it was only mixed with lipospermine-DNA complexes without covalent coupling. In addn. to melanoma cells we also obtained up to 30-fold increased transfection with BN cells (embryonic liver cells). Our data show that an .alpha.-MSH analog increased transfection independently of the MSH receptor expression but reaches efficiencies approaching those obtained with peptides derived from viral fusion proteins. The absence of targeting of constructs contg. [Nle4,D-Phe7]-.alpha.-MSH(4-10) can probably be attributed due to the relatively modest no. of MSH receptors at the surface of melanoma. We suggest, however, that the peptide hormone analog used in this study has membrane-active properties and could be of interest as helper agent to enhance non-viral gene delivery presumably by endosomal-destabilizing properties.

IT 342643-65-6DP, lipospermine-DNA complex

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(enhancement of gene delivery by analog of .alpha.-MSH in  
receptor-independent fashion)

REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:420991 HCAPLUS

DOCUMENT NUMBER: 133:59098

TITLE: Preparation of vitronectin receptor antagonist  
**pharmaceuticals**

INVENTOR(S): Rajopadhye, Milind; Harris, Thomas David; Cheesman,  
Edward H.

PATENT ASSIGNEE(S): Du Pont Pharmaceuticals Company, USA

SOURCE: PCT Int. Appl., 362 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000035488	A2	20000622	WO 1999-US30312	19991217
WO 2000035488	A3	20001109		
W: AL, AU, BR, CA, CN, CZ, EE, HU, IL, IN, JP, KR, LT, LV, MK, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, VN, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6322770	B1	20011127	US 1999-281207	19990330
US 2002015680	A1	20020207	US 1999-281209	19990330
EP 1140203	A2	20011010	EP 1999-967442	19991217
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.:  
US 1998-112829P P 19981218  
US 1998-80150P P 19980331  
US 1998-112715P P 19981218  
US 1998-112732P P 19981218  
US 1998-112831P P 19981218  
WO 1999-US30312 W 19991217

OTHER SOURCE(S): MARPAT 133:59098

AB Compds. (Q)d-Ln-Ch (Q is a residue having an indazole-type moiety, d =  
1-10, Ln is a linking group, Ch is a metal-bonding unit) were prep'd. for  
use in the diagnosis and treatment of cancer, methods of imaging tumors in  
a patient, and methods of treating cancer in a patient. The present  
invention also provides novel compds. useful for monitoring  
**therapeutic** angiogenesis treatment and destruction of new  
angiogenic vasculature. Thus, 2-[[[4-[4-[[[3-[2-[2-[3-[[6-[[1-aza-2-(2-  
sulfophenyl)vinyl]amino](3-pyridyl)]carbonylamino]propoxy]ethoxy]ethoxy]pr  
opyl]amino]sulfonyl]phenyl]phenyl]sulfonyl]amino]-3-[[1-[3-(indazole-2-  
ylamino)propyl](1H-indazol-5-yl)]carbonylamino]propanoic acid was prep'd.  
(claimed compd.). Syntheses of **radiopharmaceuticals**, e.g.,  
99mTc(VnA) (tricine) (phosphine), where VnA represents the vitronectin  
receptor antagonist, are also described.

IT 277329-15-4

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(prepn. of vitronectin receptor antagonist **pharmaceuticals**)

L19 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:235037 HCAPLUS

DOCUMENT NUMBER: 133:29419

TITLE: Generation of antibodies directed against the low-immunogenic peptide-toxins microcystin-LR/RR and nodularin

AUTHOR(S): Baier, W.; Loleit, M.; Fischer, B.; Jung, G.; Neumann, U.; Weiss, M.; Weckesser, J.; Hoffmann, P.; Bessler, W. G.; Mittenbuhler, K.

CORPORATE SOURCE: Institut fur Immunobiologie der Universitat, Freiburg, D-79104, Germany

SOURCE: International Journal of Immunopharmacology (2000), 22(5), 339-353

CODEN: IJIMDS; ISSN: 0192-0561

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The prepn. of antibodies against the liver toxin microcystin, as described here, is of major importance for its detection and purifn. in food and water, and for a **therapeutic** approach to neutralize the toxin by passive immunization. Microcystin-LR (MLR) and microcystin-RR (MRR) were purified from cyanobacterial cell materials by extn., Sephadex LH-20-, ODS silica gel-, ionic exchange and RP-HPLC-chromatog. To reduce the toxicity for parenteral administration, microcystins were coupled by the carbodiimide method to poly-L-lysine (PLL50,000). Mice and rabbits were immunized with the conjugates in the presence of two lipopeptide immunoadjuvants (P3CSK4 and P3CS-Th). High MLR-specific antibody levels were obsd. after parenteral coadministration of antigen and lipopeptides, whereas no anti-MLR antibodies were obtained with free microcystin or the microcystin-PLL50,000-conjugate in the absence of lipopeptide. In oral immunization, coadministration of antigen and adjuvants resulted in an accelerated development of anti MLR-specific antibodies and high antibody levels. Using the antisera, the authors could detect different microcystins and nodularin down to a concn. range of 10-50 ng/mL by a competitive inhibition ELISA; detection of microcystins in crude cell prepns. was also possible. Furthermore, microcystins from different sources could be detected and discriminated from cyclic cyanopeptolines.

IT 202123-06-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(as adjuvant in prepn. of antibodies to microcystins)

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19. ANSWER 6 OF 13 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:4339 HCAPLUS

DOCUMENT NUMBER: 128:123393

TITLE: **Drug** specific antibodies: T-cell epitope-lipopeptide conjugates are potent adjuvants for small antigens in vivo and in vitro

AUTHOR(S): Mittenbuhler, Klaus; Loleit, Manuel; Baier, Wiltrud; Fischer, Bianca; Sedelmeier, Eva; Jung, Gonther; Winkelmann, Gunther; Jacobi, Clemens; Weckesser, Jurgen; Erhard, Michael H.; Hofmann, Andrea; Bessler, Wolfgang; Hoffmann, Petra

CORPORATE SOURCE: Institut for Immunbiologie der Universitat, Freiburg, D-79104, Germany

SOURCE: International Journal of Immunopharmacology (1997),

19(5), 277-287

CODEN: IJIMDS; ISSN: 0192-0561

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB To generate conventional or monoclonal antibodies for the serol. detection of **drugs**, antibiotics, toxins and other low mol. mass substances, a suitable and effective adjuvant is needed. Lipopeptides derived from a major component of the bacterial cell wall constitute potent nontoxic and nonpyrogenic immunoadjuvants when mixed with conventional antigens. Here we demonstrate that the synthetic lipopeptide N-palmitoyl-S-[2,3-bis(palmitoyloxy)-(2R,S)-propyl]-(R)-cysteiny-serine (P3CS) coupled to a Th cell epitope (P3CS-Th) can efficiently enhance the specific immune response against low mol. wt. compds. in different species. In the presence of the synthetic lipopeptide P3CS-Th, the peptides which are per se non-immunogenic stimulated a specific humoral immune response in mice after i.p. application. Mixts. contg. adjuvants without the Th sequence showed no significant antibody induction. A marked enhancement of the humoral immune response was obtained with the low mol. mass antigens Iturin AL, Herbicolin A and Microcystin (MLR) coupled to poly-L-lysine (MLR-PLL), in rabbits and in chickens. Lipopeptide-Th cell epitope conjugates also constituted adjuvants for the in vitro immunization of either human mononuclear cells or mouse B-cells with MLR-PLL; after fusion of the immunized cultures with the heteromyeloma cell lines CB-F7 or the mouse myeloma cell line SP 2/0, resp., we obsd. a significantly increased yield of antibody-secreting hybridomas.

IT 202123-06-6

RL: ARU (Analytical role, unclassified); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)

(lipopeptide conjugates with T-cell epitope as adjuvants for small antigens used to obtain antibodies for serol. detection of **drugs** and toxins)

L19 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:650334 HCAPLUS

DOCUMENT NUMBER: 127:262682

TITLE: Preparation of lymph-absorbable imidazole derivatives as anti-AIDS agents

INVENTOR(S): Aono, Katsutoshi; Ichihashi, Teruhisa; Sugawara, Tamio; Hirano, Koichiro

PATENT ASSIGNEE(S): Shionogi &amp; Co., Ltd., Japan; Aono, Katsutoshi; Ichihashi, Teruhisa; Sugawara, Tamio; Hirano, Koichiro

SOURCE: PCT Int. Appl., 122 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9735843	A1	19971002	WO 1997-JP813	19970314
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

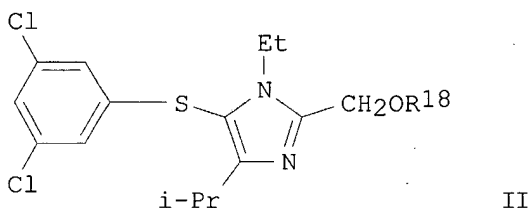
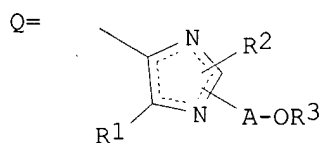
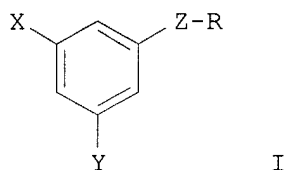
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB,  
 GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN,  
 ML, MR, NE, SN, TD, TG

AU 9719408	A1 19971017	AU 1997-19408	19970314
EP 893442	A1 19990127	EP 1997-907316	19970314

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, FI

US 6054591	A 20000425	US 1998-101960	19980721
PRIORITY APPLN. INFO.:		JP 1996-103299	19960328
		WO 1997-JP813	19970314

OTHER SOURCE(S): MARPAT 127:262682  
 GI



AB Compds. represented by general formula (I; Z = S, SO, SO<sub>2</sub>, or CH<sub>2</sub>; R = a group represented by general formulas Q wherein R<sub>1</sub> = optionally substituted lower alkyl; R<sub>2</sub> = optionally substituted lower alkyl, lower alkenyl, cycloalkylalkyl, lower aroylalkyl, aralkyl, heteroarylalkyl or carbamoyloxyalkyl; A = lower alkylene which may have an intervening heteroatom; R<sub>3</sub> = C<sub>11</sub>-20 alkyl, acyloxyalkyl, CR<sub>4</sub>R<sub>5</sub>(OR<sub>6</sub>), C(:CR<sub>7</sub>R<sub>8</sub>)R<sub>9</sub>, COR<sub>10</sub>, CO<sub>2</sub>R<sub>13</sub>, CONHCOR<sub>14</sub>, CONHCO<sub>2</sub>R<sub>15</sub>, CONHCH<sub>2</sub>NR<sub>16</sub>R<sub>17</sub>; R<sub>4</sub>, R<sub>5</sub> = H, optionally substituted alkyl, aryl, or aralkyl, CR<sub>4</sub>R<sub>5</sub> = cyclic alkyl or o-biphenylenemethane; R<sub>6</sub> = optionally substituted alkyl; R<sub>7</sub> - R<sub>9</sub> = H or optionally substituted alkyl or CR<sub>7</sub>R<sub>8</sub> = optionally substituted cyclic alkenyl; R<sub>10</sub> = C<sub>6</sub>-20 alkyl, cycloalkyl, optionally substituted aralkyl, etc.; R<sub>13</sub> = C<sub>6</sub>-20 alkyl, optionally substituted aralkyl or heteroarylalkyl; R<sub>14</sub> = H, alkyl, alkenyl, cycloalkylalkyl, optionally substituted aryl, aralkyl, or heteroarylalkyl; R<sub>15</sub> = alkyl, alkenyl, cycloalkylalkyl, optionally substituted aryl, aralkyl, or heteroarylalkyl; R<sub>16</sub>, R<sub>17</sub> = alkyl or aralkyl or NR<sub>16</sub>R<sub>17</sub> = heterocyclyl) salts and hydrates thereof are prep'd. Anti-AIDS agents contg. I or salts or hydrates thereof are claimed. These compds. possess potent anti-HIV activity, can be administered orally and absorbed efficiently through lymph vessels in the intestinal tract, and migrate to lymph nodes in high concns. After they are absorbed in lymph, they themselves or after being hydrolyzed in vivo into active forms exhibit anti-HIV activity. Thus, a soln. of

2-(hydroxymethyl)imidazole deriv. (II; R18 = H) in THF was stirred with octanoyl isocyanate under ice-cooling for 1 h and then at for 1 h to give II (R18 = CONHCOC7H15). The latter compd. and II (R = CONHAc) in vitro showed EC50 of 0.008-0.016 and 0.001, resp., for inhibiting the cell damage of HIV (HTLV-IIIb)-infected human T cells (MOLT-4 clone 8).

IT **196405-91-1P**

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of lymph-absorbable imidazole derivs. as anti-HIV and anti-AIDS agents)

L19 ANSWER 8 OF 13 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:375282 HCAPLUS

DOCUMENT NUMBER: 127:95531

TITLE: Preparation of glycolipid amphipathic, micellar delivery systems for DNA and RNA biologically active polyions

INVENTOR(S): Wolff, Jon A.; Budker, Vladimir; Gurevich, Vladimir

PATENT ASSIGNEE(S): Wolff, Jon A., USA; Budker, Vladimir; Gurevich, Vladimir

SOURCE: U.S., 17 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

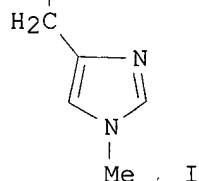
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5635487	A	19970603	US 1994-368150	19941229

GI

CH<sub>3</sub>(CH<sub>2</sub>)<sub>7</sub>CH:CH(CH<sub>2</sub>)<sub>7</sub>CO<sub>2</sub>CH<sub>2</sub>

CH<sub>3</sub>(CH<sub>2</sub>)<sub>7</sub>CH:CH(CH<sub>2</sub>)<sub>7</sub>CO<sub>2</sub>CH



AB The present invention provides a compn. comprising a population of micelles wherein each micelle comprises at least one amphipathic compd. layer that surrounds a non-aq. core that contains a polyion. Also provided are a method of prepg. such a compn. and the uses of such compns. for delivering biol. active polyions to cells. Thus lipid I was prepd. as **drug** delivery system and can be used to express a gene product in cell.

IT **191990-50-8P**

RL: BPR (Biological process); BSU (Biological study, unclassified); SPN

(Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);  
 PREP (Preparation); PROC (Process); USES (Uses)  
 (prepn. of glycolipid amphipathic micellar delivery systems for DNA and  
 RNA biol. active polyions)

IT 191990-30-4P 191990-32-6P 191990-33-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of glycolipid amphipathic micellar delivery systems for DNA and  
 RNA biol. active polyions)

L19 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:493096 HCAPLUS

DOCUMENT NUMBER: 122:306386

TITLE: Anticonvulsant activity of phenytoin-lipid conjugates,  
 a new class of phenytoin **prodrugs**

AUTHOR(S): Scriba, Gerhard K. E.; Lambert, Didier M.; Poupaert,  
 Jacques H.

CORPORATE SOURCE: Sch. Pharmacy, Univ. Muenster, Muenster, 48149,  
 Germany

SOURCE: J. Pharm. Pharmacol. (1995), 47(3), 197-203

CODEN: JPPMAB; ISSN: 0022-3573

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The anticonvulsant activity of phenytoin-lipid conjugates obtained by  
 covalent binding of 3-hydroxymethylphenytoin to dimyristoylglycerides via  
 a succinidyl linkage to 2-(1,3-dimyristoylglyceryl)butyric acid and to  
 3-myristoyl-2-myristoylmethylpropionic acid was evaluated in the maximal  
 electroshock (MES) test and the seizure threshold test with s.c.  
 pentetrazol. The phenytoin-lipid conjugates were less active than the  
 parent **drug** in the MES test after i.p. administration as  
 suspensions, but exhibited comparable activity when injected as a soln. in  
 dimethylsulfoxide. They also protected mice from MES-induced seizures  
 following oral administration of aq. suspensions of the compds. or when  
 incorporated into emulsions. The anticonvulsant activity could be  
 correlated to in-vitro pancreatic lipase-mediated hydrolysis. The  
 bis-deacyl derivs. were at least as active but in some cases also more  
 toxic than phenytoin. Oral administration of two of the lipid conjugates  
 resulted in a faster onset of the anticonvulsant activity compared with  
 the administration of an equimolar dose of phenytoin itself. All compds.  
 were inactive in the s.c. pentetrazol test. It is concluded that the  
 lipids act as **prodrugs** of phenytoin, which is generated by  
 lipolysis upon oral administration.

IT 150994-98-2

RL: BAC (Biological activity or effector, except adverse); BPR (Biological  
 process); THU (Therapeutic use); BIOL (Biological study); PROC (Process);  
 USES (Uses)

(anticonvulsant activity of phenytoin-lipid conjugates a new class of  
 phenytoin **prodrugs**)

L19 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1993:656382 HCAPLUS

DOCUMENT NUMBER: 119:256382

TITLE: Phenytoin-lipid conjugates: Chemical, plasma  
 esterase-mediated, and pancreatic lipase-mediated  
 hydrolysis in vitro

AUTHOR(S): Scriba, Gerhard K. E.

CORPORATE SOURCE: Dep. Pharm. Chem., Univ. Muenster, Muenster, 48149,  
 Germany

SOURCE: Pharm. Res. (1993), 10(8), 1181-6

CODEN: PHREEB; ISSN: 0724-8741

DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Phenytoin-lipid conjugates obtained by covalent binding of hydroxymethylphenytoin to diacyl glycerides and to 3-acyloxy-2-acyloxymethylpropionic acids formed dispersions with a particle size of 10-200  $\mu\text{M}$  when briefly sonicated in a sodium taurodeoxycholate-contg. ethanol-water mixt. In contrast to the corresponding bis-deacyl derivs., the lipids were not significantly hydrolyzed in aq. buffers and in plasma. Incubation with pancreatic lipase yielded primarily the bis-deacyl compds., which are comparable to monoglycerides, and subsequently liberated phenytoin. The glyceride-derived **prodrugs** were better substrates for the enzyme than the 3-acyloxy-2-acyloxymethylpropionic acid derivs. Thus, the phenytoin lipid conjugates are hydrolyzed by pancreatic lipase in a similar manner as natural triglycerides.

IT 151227-88-2

RL: BIOL (Biological study)  
(chem. and blood plasma esterase- and pancreatic lipase-mediated hydrolysis of, as **prodrug**)

L19 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1993:617285 HCAPLUS

DOCUMENT NUMBER: 119:217285

TITLE: Phenytoin-lipid conjugates as potential **prodrugs** of phenytoin

AUTHOR(S): Scriba, Gerhard K. E.

CORPORATE SOURCE: Dep. Pharm. Chem., Univ. Muenster, Muenster, D-48149, Germany

SOURCE: Arch. Pharm. (Weinheim, Ger.) (1993), 326(8), 477-81

CODEN: ARPMAS; ISSN: 0365-6233

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Phenytoin-1-triglycerides and phenytoin-2-triglycerides were synthesized as potential **prodrugs** of phenytoin by covalent binding of 3-hydroxymethylphenytoin by succinic acid to the positions 1 and 2, resp., of diglycerides. The corresponding 1- and 2-monoglycerides were also prepd. In addn., replacement of glycerol by 3-hydroxy-2-hydroxymethylpropionic acid furnished lipids that allowed direct coupling of 3-hydroxymethylphenytoin. The lipid conjugates proved to be substrates for pancreatic lipase in vitro.

IT 150994-98-2

RL: RCT (Reactant)  
(reaction of, with benzaldehyde)

L19 ANSWER 12 OF 13 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1991:38799 HCAPLUS

DOCUMENT NUMBER: 114:38799

TITLE: Immobilized artificial membrane-bearing chromatographic supports for separation/purification of biomolecules and for evaluation of membrane-binding characteristics of biomolecules

INVENTOR(S): Pidgeon, Charles

PATENT ASSIGNEE(S): Purdue Research Foundation, USA

SOURCE: PCT Int. Appl., 79 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8908130	A1	19890908	WO 1989-US682	19890221
W: AU, BB, BG, BR, DK, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, RO, SD, SU, US				
RW: AT, BE, BJ, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG				
US 4931498	A	19900605	US 1988-160196	19880225
US 4927879	A	19900522	US 1988-261502	19881024
AU 8931946	A1	19890922	AU 1989-31946	19890221
EP 408585	A1	19910123	EP 1989-902914	19890221
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 03502836	T2	19910627	JP 1989-502706	19890221
CA 1337801	A1	19951226	CA 1989-591880	19890223
PRIORITY APPLN. INFO.:			US 1988-160196	19880225
			US 1988-261502	19881024
			WO 1989-US682	19890221

OTHER SOURCE(S): MARPAT 114:38799

AB The title supports are prepd. by immobilization of membrane constituents (amphiphilic substances, e.g., lecithins, lysolecithins, cephalins, sphingomyelins, cardiolipins, glycolipids, gangliosides, or cerebrosides) on the surface of a particulate support structure, i.e., silica, alumina, titania, or resin (5-100  $\mu$ m). The chromatog. support materials are useful for sepn./purifn. of biomols. (particularly those expressed by genetically transformed cells as novel hybrid proteins having covalently bound membrane-binding peptides) and for evaluating membrane assocn. characteristics of chem. compds. Novel phospholipid carboxylates are useful intermediates for prepg. the chromatog. supports having surfaces formed as covalently bound artificial membranes which simulate natural cellular membranes. Thus, a support (Nucleosil-lecithin) was prepd. starting from 1,12-dodecanedicarboxylic acid anhydride via formation of 1-myristoyl-2-(13-carboxytridecyl)-sn-3-glycerophosphocholine and 1-myristoyl-2-(13-carboxylimidazolidetrdecyl)-sn-3-glycerophosphocholine. The latter was reacted with Nucleosil-300(7 NH<sub>2</sub>) (silica derivatized with propylamine groups) to form Nucleosil-lecithin. Nucleosil-lecithin was packed into a HPLC column (4  $\times$  100 mm) for sepn. of D-phenylalanine and L-tryptophan. The materials may also be used in **drug** screening and other applications.

IT 131300-85-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and reaction of, with Nucleosil-300)

L19 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1987:18987 HCAPLUS

DOCUMENT NUMBER: 106:18987

TITLE: Phosphatidyl compounds and their use

INVENTOR(S): Baschang, Gerhard; Fechtig, Bruno; Hartmann, Albert; Lukas, Bohumir; Wacker, Oskar

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.

SOURCE: Eur. Pat. Appl., 79 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 169812	A1	19860129	EP 1985-810332	19850719

EP 169812	B1	19890823		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AT 45744	E	19890915	AT 1985-810332	19850719
FI 8502841	A	19860126	FI 1985-2841	19850722
FI 78300	B	19890331		
FI 78300	C	19890710		
ES 545486	A1	19861116	ES 1985-545486	19850723
DD 247680	A5	19870715	DD 1985-278881	19850723
IL 75886	A1	19891031	IL 1985-75886	19850723
DK 8503374	A	19860126	DK 1985-3374	19850724
NO 8502953	A	19860127	NO 1985-2953	19850724
JP 61043193	A2	19860301	JP 1985-162150	19850724
ZA 8505580	A	19860326	ZA 1985-5580	19850724
HU 38360	A2	19860528	HU 1985-2817	19850724
HU 194896	B	19880328		
AU 8545378	A1	19860130	AU 1985-45378	19850725
AU 582772	B2	19890413		
US 4788182	A	19881129	US 1987-113359	19871023
PRIORITY APPLN. INFO.:			CH 1984-3598	19840725
			EP 1985-810332	19850719
			US 1985-757823	19850722

AB R1TYOP(O)(OH)OCHWZ [I; R1 alkanoyl, benzoyl, acyl, amino acid acyl; T = (substituted) NH, O; Y = (carboxy deriv.-substituted) CH<sub>2</sub>CH<sub>2</sub>; W = H and Z = CH(OH)CH<sub>2</sub>OH, CH<sub>2</sub>CH<sub>2</sub>OH (.gtoreq.1 OH esterified or etherified with C8-30 aliph. acid or alc.); W = Z = esterified or etherified CH<sub>2</sub>OH], used in treating viral infections, are prepd. by acylation of HTYOP(O)(OH)OCHWZ with R1OH; or by oxidn. of R1TYOP(OR<sub>2</sub>)OCHWZ (R<sub>2</sub> = H, leaving group); or by hydrolysis of R1TYOP(O)(R<sub>3</sub>)OCHWZ (R<sub>3</sub> = halo); or by treating XYOP(O)(OH)OCHWZ (X = labile leaving group) with R1TH; or by phosphorylation of R1TY[OP(O)(OH)]<sub>n</sub>OH (n = 0, 1) with H[OP(O)OH]<sub>m</sub>OCHWZ (m = 0, 1; m + n = 1); or by esterification or etherification of I (W, Z = free hydroxyalkyl group as above). One thousand tablets contg. 0.5 wt.% I were prepd. from I [R1 = MeCH(NH<sub>2</sub>)CO, T = NH, Y = CH<sub>2</sub>CH<sub>2</sub>, W = H, Z = CH(OR<sub>4</sub>)CH<sub>2</sub>OR<sub>4</sub>, R<sub>4</sub> = palmitoyl] 0.5, powd. lactose 43.0, corn starch 52.0, **Pharmacoat**-603 3.0, Aerosil 1.0 and Mg stearate 0.5 g. In tests with mice injected with LD<sub>80-90</sub> of an influenza virus, four I at 0.01 mg/kg orally gave 50-100% survival after 23 days, vs. 20-30% in the control group.

IT **104562-05-2P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and hydrolysis of)

IT **104561-81-1P 104561-82-2P**

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(prepn. of, as antiviral agent)

=> select hit rn 119 1-13  
E21 THROUGH E34 ASSIGNED

=> fil reg

FILE 'REGISTRY' ENTERED AT 13:59:49 ON 09 JUN 2002  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 7 JUN 2002 HIGHEST RN 427375-75-5  
DICTIONARY FILE UPDATES: 7 JUN 2002 HIGHEST RN 427375-75-5

TSCA INFORMATION NOW CURRENT THROUGH January 7, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>

=>

=> s e21-e34

```

1 202123-06-6/BI
  (202123-06-6/RN)
1 150994-98-2/BI
  (150994-98-2/RN)
1 277329-15-4/BI
  (277329-15-4/RN)
1 104561-81-1/BI
  (104561-81-1/RN)
1 104561-82-2/BI
  (104561-82-2/RN)
1 104562-05-2/BI
  (104562-05-2/RN)
1 131300-85-1/BI
  (131300-85-1/RN)
1 151227-88-2/BI
  (151227-88-2/RN)
1 191990-30-4/BI
  (191990-30-4/RN)
1 191990-32-6/BI
  (191990-32-6/RN)
1 191990-33-7/BI
  (191990-33-7/RN)
1 191990-50-8/BI
  (191990-50-8/RN)
1 196405-91-1/BI
  (196405-91-1/RN)
1 342643-65-6/BI
  (342643-65-6/RN)

```

L20 14 (202123-06-6/BI OR 150994-98-2/BI OR 277329-15-4/BI OR 104561-81-1/BI OR 104561-82-2/BI OR 104562-05-2/BI OR 131300-85-1/BI OR 151227-88-2/BI OR 191990-30-4/BI OR 191990-32-6/BI OR 191990-33-7/BI OR 191990-50-8/BI OR 196405-91-1/BI OR 342643-65-6/BI)

=> d ide can l20 1-14

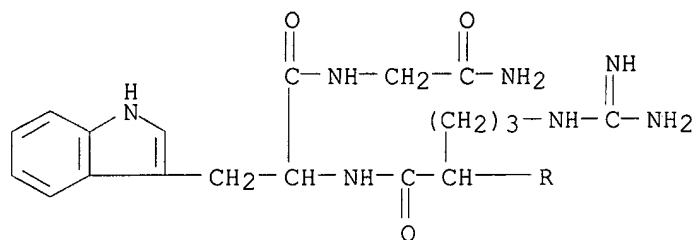
L20 ANSWER 1 OF 14 REGISTRY COPYRIGHT 2002 ACS

RN **342643-65-6** REGISTRY

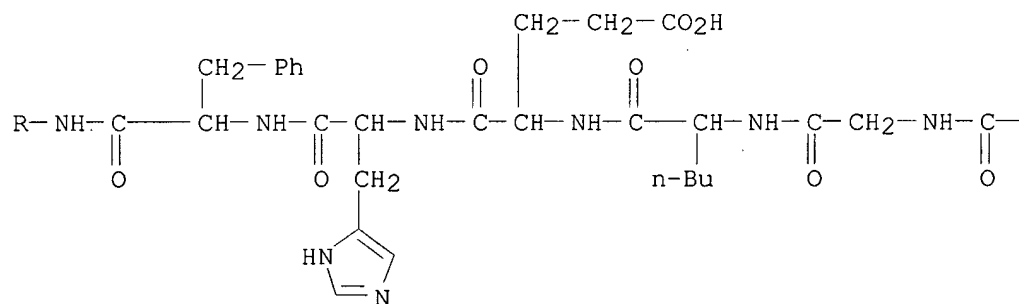
CN Poly(oxy-1,2-ethanediyl), .alpha.-[7-hydroxy-7-oxido-2,13-dioxo-10-[(1-oxohexadecyl)oxy]-6,8,12-trioxa-3-aza-7-phosphaoctacos-1-yl]-.omega.-hydroxy-, ether with N-[3-[[1-(2-hydroxyethyl)-2,5-dioxo-3-pyrrolidinyl]thio]-1-oxopropyl]glycyl-L-norleucyl-L-.alpha.-glutamyl-L-histidyl-D-phenylalanyl-L-arginyl-L-tryptophylglycinamide (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE  
 MF (C2 H4 O)<sub>n</sub> C95 H150 N17 O23 P S  
 CI PMS  
 PCT Polyether  
 SR CA  
 LC STN Files: CA, CAPLUS

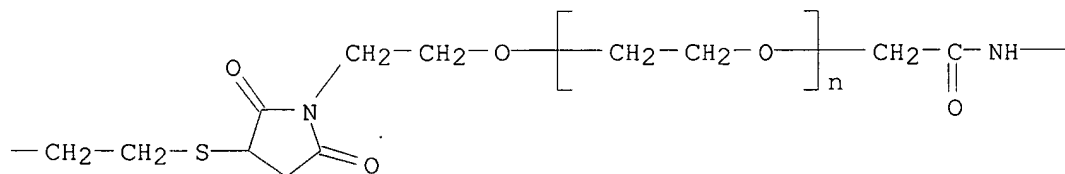
PAGE 1-A



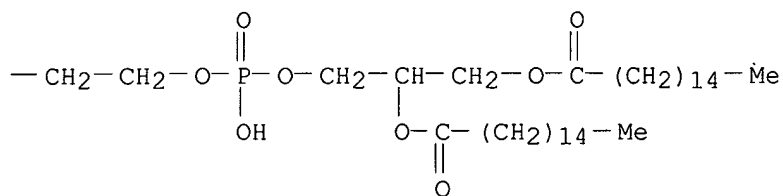
PAGE 2-A



PAGE 2-B



PAGE 2-C



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:13817

L20 ANSWER 2 OF 14 REGISTRY COPYRIGHT 2002 ACS

RN **277329-15-4** REGISTRY

CN 26,28,32-Trioxa-3,10,23-triaza-27-phosphaoctatetracontanoic acid,  
 27-hydroxy-2-[[[1-[3-(1H-imidazol-2-ylamino)propyl]-1H-indazol-5-  
 yl]carbonyl]amino]methyl]-4,11,22,33-tetraoxo-30-[(1-oxohexadecyl)oxy]-,  
 27-oxide, (2S,30R)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

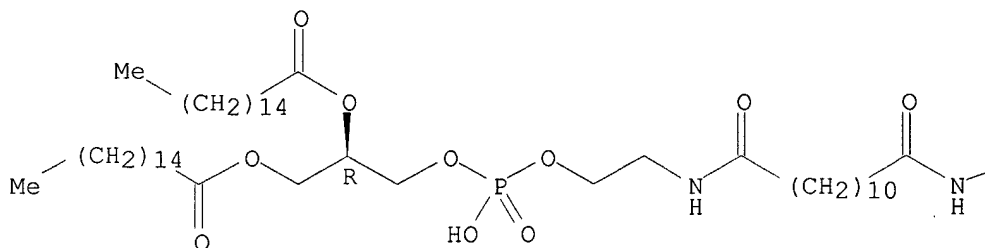
MF C72 H124 N9 O14 P

SR CA

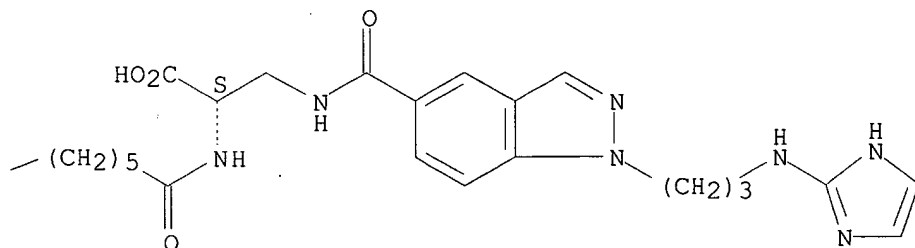
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



2 REFERENCES IN FILE CA (1967 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:54028

REFERENCE 2: 133:59098

L20 ANSWER 3 OF 14 REGISTRY COPYRIGHT 2002 ACS

RN 202123-06-6 REGISTRY

CN Glycine, S-[2,3-bis[(1-oxohexadecyl)oxy]propyl]-N-(1-oxohexadecyl)-L-cysteinyl-L-seryl-L-phenylalanyl-L-isoleucyl-L-seryl-L-.alpha.-glutamyl-L-alanyl-L-isoleucyl-L-isoleucyl-L-histidyl-L-valyl-L-leucyl-L-histidyl-L-seryl-L-arginyl-L-histidyl-L-prolyl- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

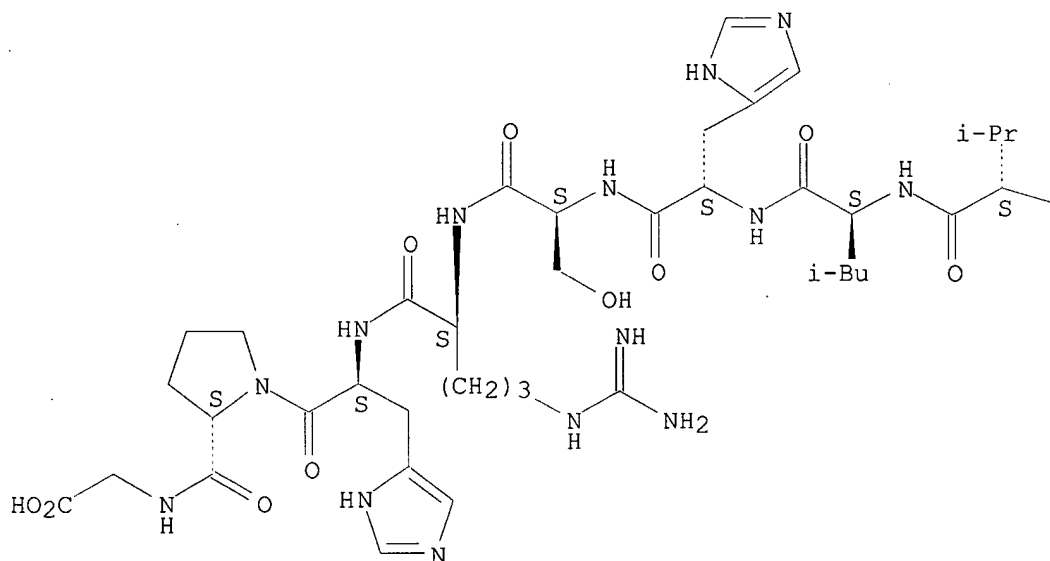
MF C140 H235 N27 O29 S

SR CA

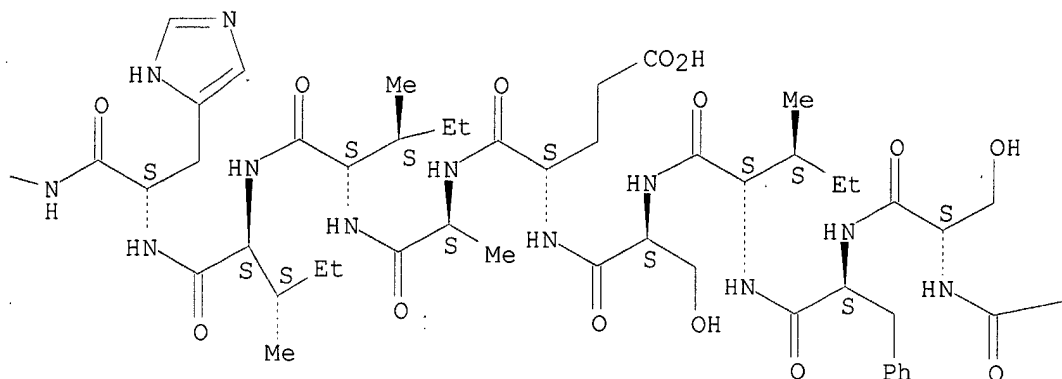
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

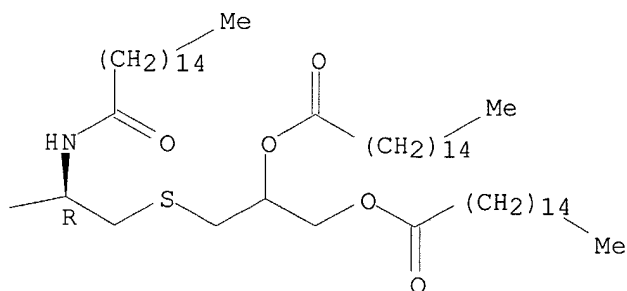
PAGE 1-A



PAGE 1-B



PAGE 1-C



3 REFERENCES IN FILE CA (1967 TO DATE)  
 3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:271464

REFERENCE 2: 133:29419

REFERENCE 3: 128:123393

L20 ANSWER 4 OF 14 REGISTRY COPYRIGHT 2002 ACS

RN **196405-91-1** REGISTRY

CN Decanedioic acid, 2-[[5-[(3,5-dimethylphenyl)thio]-2-methyl-4-(1-methylethyl)-1H-imidazol-1-yl]methoxy]ethyl 2-[(1-oxohexadecyl)oxy]-1-[[[(1-oxohexadecyl)oxy]methyl]ethyl ester (9CI) (CA INDEX NAME)

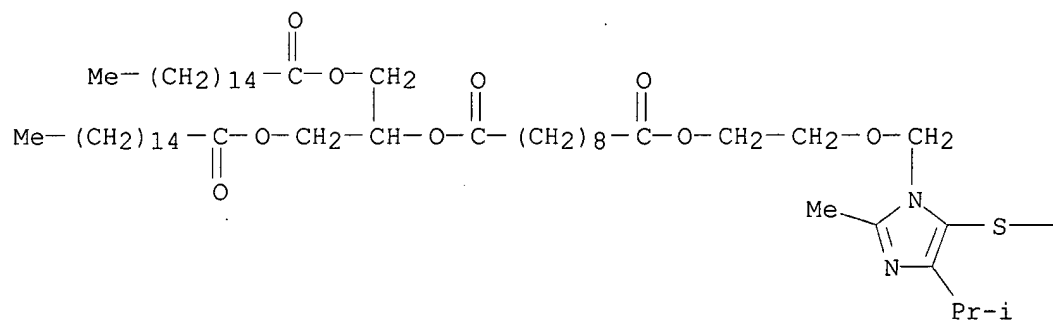
FS 3D CONCORD

MF C63 H108 N2 O9 S

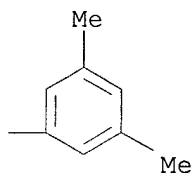
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



PAGE 1-B



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 127:262682

L20 ANSWER 5 OF 14 REGISTRY COPYRIGHT 2002 ACS

RN 191990-50-8 REGISTRY

CN 9-Octadecenoic acid, 2-(1-methyl-1H-imidazol-5-yl)-1-[[[(1-oxo-9-octadecenyl)oxy]methyl]ethyl ester (9CI) (CA INDEX NAME)

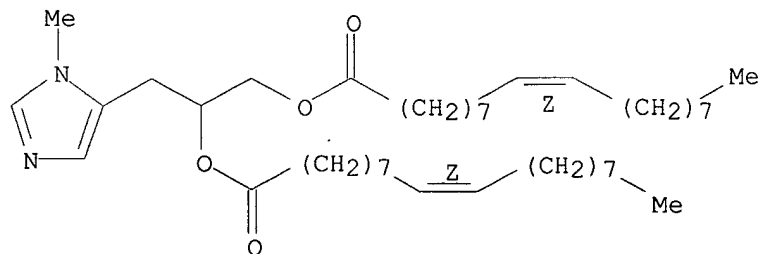
FS STEREOSEARCH

MF C43 H76 N2 O4

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Double bond geometry as shown.



## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 127:95531

L20 ANSWER 6 OF 14 REGISTRY COPYRIGHT 2002 ACS

RN 191990-33-7 REGISTRY

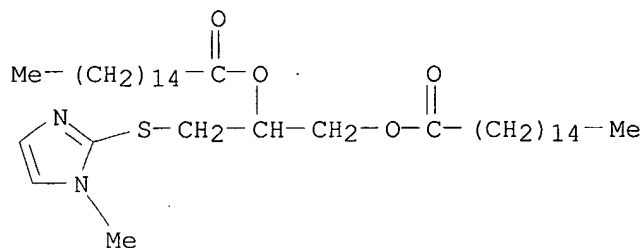
CN Hexadecanoic acid, 1-[[1-(1-methyl-1H-imidazol-2-yl)thio]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C39 H72 N2 O4 S

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1967 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:269275

REFERENCE 2: 127:95531

L20 ANSWER 7 OF 14 REGISTRY COPYRIGHT 2002 ACS

RN 191990-32-6 REGISTRY

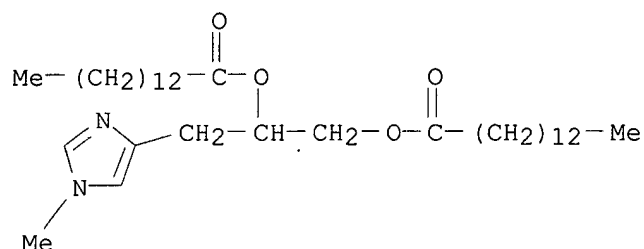
CN Tetradecanoic acid, 2-(1-methyl-1H-imidazol-4-yl)-1-[[1-(1-oxotetradecyl)oxy]methyl]ethyl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C35 H64 N2 O4

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:269275

REFERENCE 2: 127:95531

L20 ANSWER 8 OF 14 REGISTRY COPYRIGHT 2002 ACS

RN 191990-30-4 REGISTRY

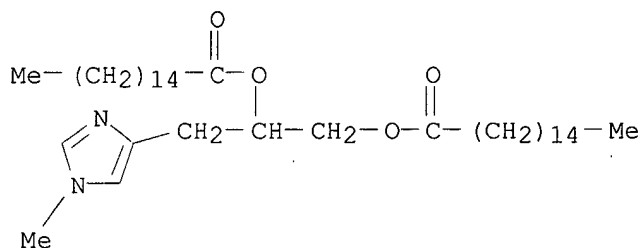
CN	Hexadecanoic acid, 1-[(1-methyl-1H-imidazol-4-yl)methyl]-1,2-ethanediyl ester- (9CI) (CA INDEX NAME)
----	--

FS 3D CONCORD

MF C39 H72 N2 O4

SR      CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:269275

REFERENCE 2: 127:95531

L20 ANSWER 9 OF 14 REGISTRY COPYRIGHT 2002 ACS

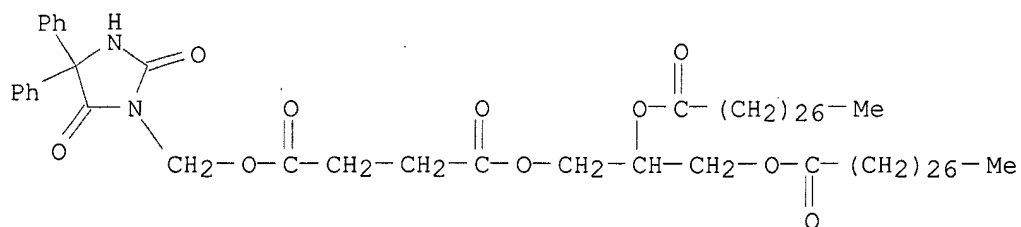
RN 151227-88-2 REGISTRY

CN Butanedioic acid, 2,3-bis[(1-oxooctacosyl)oxy]propyl (2,5-dioxo-4,4-diphenyl-1-imidazolidinyl)methyl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C79 H132 N2 O10

SR CA  
LC STN Files: CA, CAPLUS

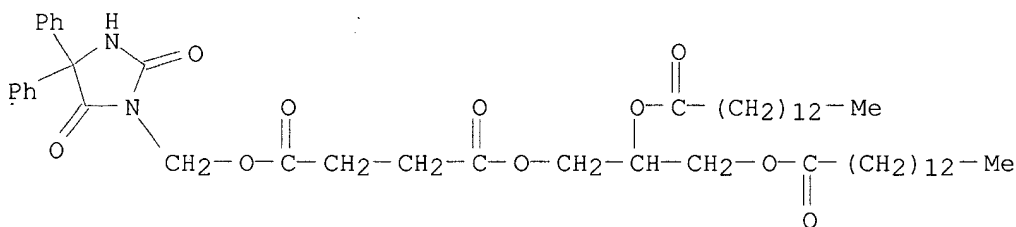


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 119:256382

L20 ANSWER 10 OF 14 REGISTRY COPYRIGHT 2002 ACS  
RN **150994-98-2** REGISTRY  
CN Butanedioic acid, 2,3-bis[(1-oxotetradecyl)oxy]propyl (2,5-dioxo-4,4-diphenyl-1-imidazolidinyl)methyl ester (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C51 H76 N2 O10  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

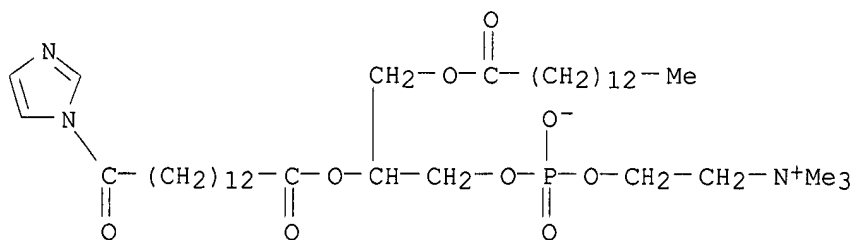
2 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 122:306386

REFERENCE 2: 119:217285

L20 ANSWER 11 OF 14 REGISTRY COPYRIGHT 2002 ACS  
RN **131300-85-1** REGISTRY  
CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-7-[[14-(1H-imidazol-1-yl)-1,14-dioxotetradecyl]oxy]-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C39 H72 N3 O9 P

SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 114:38799

L20 ANSWER 12 OF 14 REGISTRY COPYRIGHT 2002 ACS

RN **104562-05-2** REGISTRY

CN 1H-Imidazole-1-carboxylic acid, 4-[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-8-hydroxy-8-oxido-3,14-dioxo-11-[(1-oxodecyl)oxy]-7,9,13-trioxa-4-aza-8-phosphatricos-1-yl]-, 1,1-dimethylethyl ester, monosodium salt, [R-(R\*,S\*)]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1H-Imidazole-1-carboxylic acid, 4-[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-8-hydroxy-3,14-dioxo-11-[(1-oxodecyl)oxy]-7,9,13-trioxa-4-aza-8-phosphatricos-1-yl]-, 1,1-dimethylethyl ester, P-oxide, monosodium salt, [R-(R\*,S\*)]-

FS STEREOSEARCH.

MF C41 H73 N4 O13 P . Na

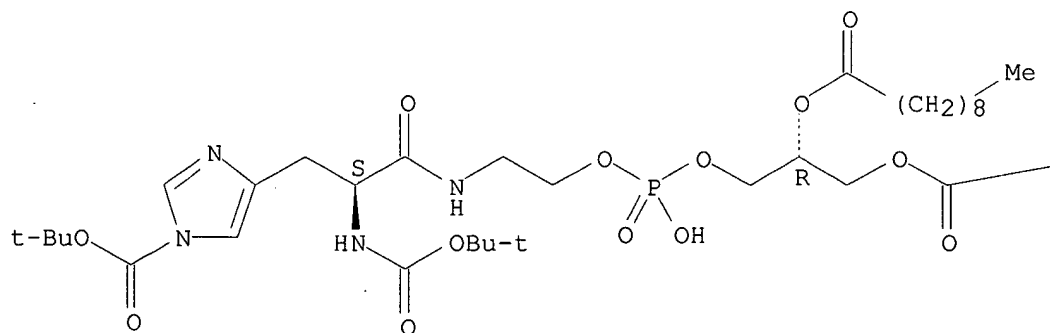
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CRN (104561-81-1)

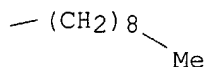
Absolute stereochemistry.

PAGE 1-A



● Na

PAGE 1-B



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 106:18987

L20 ANSWER 13 OF 14 REGISTRY COPYRIGHT 2002 ACS

RN **104561-82-2** REGISTRY

CN Decanoic acid, 1-[9-amino-3-hydroxy-10-(1H-imidazol-4-yl)-3-oxido-8-oxo-2,4-dioxo-7-aza-3-phosphadec-1-yl]-1,2-ethanediyl ester, [R-(R\*,S\*)]-(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Decanoic acid, 1-[9-amino-3-hydroxy-10-(1H-imidazol-4-yl)-8-oxo-2,4-dioxo-7-aza-3-phosphadec-1-yl]-1,2-ethanediyl ester, P-oxide, [R-(R\*,S\*)]-

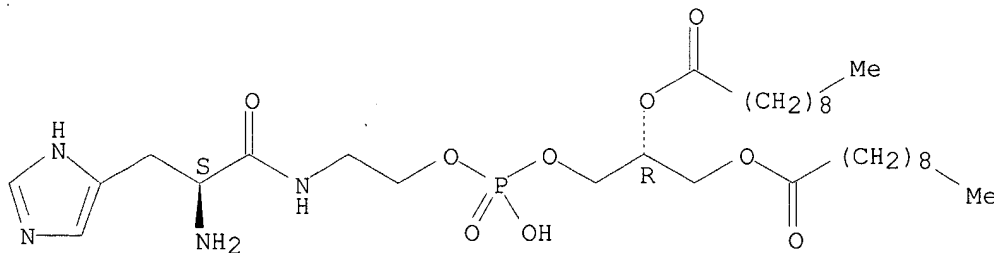
FS STEREOSEARCH

MF C31 H57 N4 O9 P

SR CA

LC STN.Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 106:18987

L20 ANSWER 14 OF 14 REGISTRY COPYRIGHT 2002 ACS

RN **104561-81-1** REGISTRY

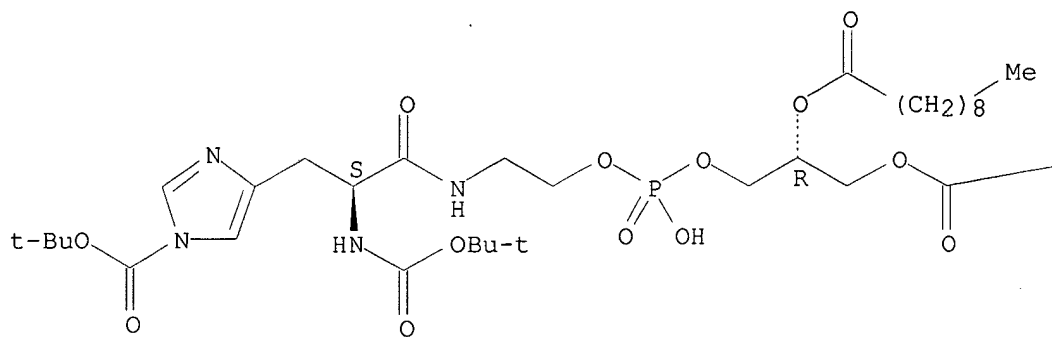
CN 1H-Imidazole-1-carboxylic acid, 4-[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-8-hydroxy-8-oxido-3,14-dioxo-11-[(1-oxodecyl)oxy]-7,9,13-trioxa-4-aza-8-phosphatricos-1-yl]-, 1,1-dimethylethyl ester, [R-(R\*,S\*)]-(9CI) (CA INDEX NAME)

## OTHER CA INDEX NAMES:

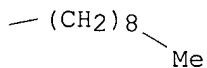
CN 1H-Imidazole-1-carboxylic acid, 4-[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-8-hydroxy-3,14-dioxo-11-[(1-oxodecyl)oxy]-7,9,13-trioxa-4-aza-8-phosphatricos-1-yl]-, 1,1-dimethylethyl ester, P-oxide, [R-(R\*,S\*)]-  
 FS STEREOSEARCH  
 MF C41 H73 N4 O13 P  
 CI COM  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 106:18987